CATALOGUE

BOOK NO.
975

OF THE

BIRDS

IN THE

BRITISH MUSEUM.

VOLUME V.

LONDON:
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1881.

CATALOGUE

OF THE

PASSERIFORMES,

OR

PERCHING BIRDS,

IN THE

COLLECTION

OF THE

BRITISH MUSEUM.

CICHLOMORPHÆ: PART II.

CONTAINING THE FAMILY

TURDIDÆ

(WARBLERS AND THRUSHES).

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BY

HENRY (SEEBOHM.)

LONDON:
PRINTED BY ORDER OF THE TRUSTEES.
1881.

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PREFACE.

THE Fifth Volume of the 'Catalogue of the Birds in the British Museum' contains an account of all the species of Warblers and Thrushes known at present; it has been prepared by Mr. H. Seebohm, whose special acquaintance with this group of Birds is probably unequalled. The total number of species described amounts to 344, of which no less than 303 are in the British Museum; they are represented by 2560 examples.

Of the principal donors we have to mention the author himself, Capt. Stackhouse Pinwill, F. DuCane Godman and O. Salvin, Esqrs., Lieut.-Col. Irby, Lord Lilford, and Canon Tristram. The frequent occurrence on the following pages of the name of B. H. Hodgson, Esq., is a testimony of the lasting value of the collections which he deposited in the Museum nearly forty years ago.

ALBERT GÜNTHER,
Keeper of the Department of Zoology.

British Museum,
Jan. 14, 1881.

INTRODUCTION.

When I undertook to prepare the fifth volume of the Catalogue of Birds, at the request of Dr. Günther, I hoped to be able, by devoting to it a year's work, to render it as nearly perfect as the present state of our ornithological knowledge would permit. After two years' close application I am obliged to admit that many difficult points have had to be somewhat hurriedly settled for want of time to work them out, or to be left undetermined for want of material upon which to base an opinion. I must also ask for indulgence for the errors and omissions which are sure to be found in the voluminous synonymy required to make an index, not only to the nomenclature, but also to the general literature of each species treated of in the volume. I hope, however, that the results of my work are at least worth the labour I have bestowed upon it, and that I have not only removed many difficulties from the study of a group of birds which have hitherto been in a greater confusion than many others, but also smoothed the way towards the solution of some problems which puzzle all ornithological students.

It is only fair to those who cannot but think that my treatment of genera in this volume is more or less heterodox, that I should attempt some defence or explanation in these introductory remarks. If I am accused of disturbing the existing genera of

birds, in some instances by cutting up recognized genera, and in others by uniting several together, I can only plead that I have not done so capriciously, but in order to facilitate the perception of the community of origin, which must more and more interest those who accept the theory of evolution.

It has been accepted as an axiom amongst ornithologists that genera must be founded upon structural characters. The reader will find that in the first division of my work I have made use of characters that are not structural in defining some genera, and have, in many cases, considered so-called structural characters as having only value enough to divide genera into subgeneric groups. In the second division of my work I have convinced myself that these so-called structural characters have no generic value at all, and I have been obliged to fall back upon colour or pattern of colour as the only character which indicates near relationship. In my opinion the pattern of the colour in the family or subfamily of Turdinæ is a character which is more trustworthy (as showing community of origin), which in fact dates further back than the shape of the wings, tail, or bill.

The species included in this volume are admitted by most modern ornithologists to be the most highly developed group of birds. Amongst them are found the finest songsters, showing the highest development of the vocal organs, whilst few families can rival them in their powers of flight. In many species their range of migration extends from beyond the limit of forest-growth in the Arctic regions to the limit of continental land in the Southern hemisphere. It is difficult to say which of the two subfamilies is most highly developed. The Sylviinæ have acquired a complete double moult, and have most of them lost the spotted plumage of their remote common ancestors, not only in the adult but also in the young; but they still retain the scutellated tarsus. The Turdinæ, on the other hand, have scarcely the rudiments of a spring moult, and retain the spotted plumage of their remote common ancestors in the nestling plumage, but the scutellated tarsus only occasionally appears in the very young birds of a few species. On the whole, however, I am inclined to give the palm to the latter group. They are undoubtedly the finest songsters. It may be that their greater size and strength has rendered the other changes less necessary. They

are one of the most cosmopolitan groups of birds, and undoubtedly the most cosmopolitan of Passerine birds. From these two characters, their high development and the cosmopolitan character of their distribution, we may infer that they are an example of the most numerous, most recent, and most nearly allied groups of birds. In fact they form one enormous genus. There has been no time or opportunity for intermediate forms to die out. Nature has not yet split them up into genera; in fact she has as yet only very imperfectly segregated them into species. Under these circumstances their subdivision into generic groups is to some extent arbitrary. I have endeavoured to choose my types of genera as carefully as possible, and to define their limits (*i. e.* to draw a line where nature has drawn none) with as much judgment as possible. The keys to the genera are, I admit, very artificial, and will require modification when new species are discovered; but I have endeavoured to characterize the genera at length, and in most cases I trust that the instinct of the ornithological student will enable him to tell a Chat, for example, from a Redstart, without being able to define the characters of each genus.

It is also due to the student that some explanation should be given of the way in which conspecies*, or forms between which the difference is only subspecific, are treated in this volume. In the previous volumes of the 'Catalogue of Birds' subspecific forms are recognized. This is an immense stride upon the hard and tight system of previous English ornithologists who refuse to acknowledge the imperfectly segregated species which undoubtedly exist in nature, because forsooth their binomial system of nomenclature does not easily lend itself to their discrimination. The American system, clumsy as it is, has undoubtedly the advantage of being far in advance of the old mode. We must all admit that *Corone macrorhyncha*, var. *levaillanti* is most objectionable as a name for an extreme form, and one, moreover, which leaves the intermediate forms nameless. It is very important that no mistake should be made as to what constitutes a conspecies. Two forms may be very closely allied; but if the difference between them, however small it may be, is constant, and is not attributable to age, sex, or season,

* I am indebted to Professor Schlegel for this word.

the probabilities are that it is a specific difference. On the other hand, if the two forms are so closely allied that they interbreed and produce fertile offspring, which again interbreed, we may draw two inferences—first, that the difference between the two forms is only subspecific, and, second, that between the two extremes must be an infinite gradation of intermediate forms. If the two forms have different areas of geographical distribution (which is usually the case), the intermediate ones will be found where the two areas overlap. If, from any cause, the species should be exterminated in the overlapping areas, and the causes which produced the variations of the two forms still continue, the peculiarities of each become emphasized, until they become so far separated, that should their areas of distribution again overlap they will nevertheless not interbreed, and the two species may be considered to be completely segregated. Under these circumstances, I have preferred to retain the binomial nomenclature for each of the extreme forms, reserving the trinomial name for the intermediate ones, uniting the two specific names by a hyphen, and placing the name of the bird first which it most resembles. Sterile hybrids may be denoted also by a trinomial name, the two specific names being united by a cross, the name of the male taking the precedence.

Whilst I have endeavoured to bring the treatment of genera and of specific and subspecific forms into harmony with the latest discoveries of science, and therefore may be considered an ornithological revolutionist by those who have not yet accepted the modern theories of evolution, upon questions of nomenclature I have adopted conservative principles. The former involve questions of fact, in which it is necessary to march with the progress of research; the latter are merely questions of names, in which it must be obvious to the merest tyro that change is in itself an evil. It appears to me that the recent attempts to carry out certain parts of the Stricklandian code to an extreme that may not inaptly be called revolutionary, has been productive of much confusion and unnecessary novelty. This I have endeavoured studiously to avoid by retaining the names in familiar use for many common birds, even where those names are not the oldest. I have only rejected them in cases where the name has been so frequently misapplied to

other species as to make it doubtful which it might be intended to designate, or where the name was first used for another species which was also clearly defined. The violation of the rules of nomenclature laid down by the British Association for the Advancement of Science is nothing new in ornithology. I know of no writer who attempts to carry them out in their entirety. The modern attempt to carry out the law of priority regardless of consequences, which has introduced so many unknown names into our nomenclature to the detriment of the study of ornithology, has generally been in direct violation of the equally important law of clear definition, which, if it were in its turn carried out in the same unrelenting manner, would further complicate our nomenclature to a perhaps still greater degree. If the new names already attempted to be introduced be carefully examined, it will be found that they generally fail in clear definition. It appears to me to be a great mistake to rake up old and little-used names, and to adopt them because the balance of collateral evidence that they were intended by their authors to be applied to certain species is in their favour. I venture to hope that future ornithologists will retain the old familiar names, even if the law of priority has to be modified to countenance their retention. I have accordingly adopted the law of priority with the following modifications—that names which have been extensively misapplied must be rejected, and names otherwise unobjectionable must be retained, if a majority of ornithological writers have used them, even though they may not be the oldest. The adoption of this conformation of the law to the practice of the good old times would also have another immense advantage. It would enable us to omit the authority for the specific name, as all names would henceforth be *plurimorum auctorum*, and thus the stigma that our names are after all trinomial would be avoided. Like many other conservative practices, this may not be very logical, but I take it to be an eminently practical solution of the difficulties that surround ornithological nomenclature.

The following explanations are necessary to make the synonymy intelligible:—

"*Turdus modestus*, Blyth nec Eyton" means that Blyth gave this name to the species in question, that Eyton had previously given

the same name to another species—a fact which Blyth did not know or did not remember at the time.

"*Saxicola leucomela*, Pall. apud Dresser" means that, in my opinion, Dresser was in error when he identified the species in question with the species to which Pallas gave the above-mentioned name.

"*Sylvia sarda*, Marmora fide Temm." means that Temminck ascribes this name to Marmora, but that I have been unable to find any publication in which this name was given by Marmora.

The following contractions are used in the list of specimens:—

"[C.]" means "Collected by;"

"[P.]" means "Presented by;"

"[E.]" means "Received in exchange from."

The thanks of the author are due to various gentlemen for the loan of specimens, many of them types, without which it would have been impossible to work out this obscure group satisfactorily—particularly to George N. Lawrence, Esq., Canon Tristram, Dr. Sclater, O. Salvin, Esq., F. D. Godman, Esq., Captain Wardlaw Ramsay, Allan Hume, Esq., Dr. Scully, W. T. Blanford, Esq., Captain Shelley, H. E. Dresser, Esq., W. E. Brooks, Esq., John Gould, Esq., E. W. H. Holdsworth, Esq., and Howard Saunders, Esq.

The author also wishes to record his especial thanks to Mr. R. Bowdler Sharpe for innumerable acts of courtesy in giving him assistance, frequently at considerable personal inconvenience; and also to acknowledge the obligations he is under for the facilities which have been so generously afforded him of examining types and other specimens in the Museums at Cambridge, Berlin, Frankfort, Bremen, Hamburg, Leyden, Paris, Copenhagen, St. Petersburg, Moscow, Washington, Philadelphia, Boston, and New York.

HENRY SEEBOHM.

British Museum,
Nov. 1, 1880.

ZOOLOGICAL GARDENS
1875.
CALCUTTA

SYSTEMATIC INDEX.

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a. Passeres normales.

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ERRATA.

Page 326, line 22, *for* Orocetes gularis *read* Orœcetes gularis.

„ 333, „ 27, *for* Sialia arctica *read* Salia arctica.

„ 340, „ 22, *for* Lusciola thitys *read* Lusciola tithys.

„ 340, „ 39, *for* Lusciola tithys *read* Lusciola thytis.

„ 343, „ 34, *for* Shikarpore, Afghanistan, *read* Shikarpore, Scinde.

„ 353, „ 1, *for* Ruticilla cærulocephala *read* Ruticilla cæruleocephala.

„ 353, „ 2, *for* Phœnicura cærulocephala *read* Phœnicura cæruleocephala.

„ 353, „ 8, *for* Ruticilla cærulocephala *read* Ruticilla cæruleocephala.

„ 353, „ 14, *for* Adelura cærulocephala *read* Adelura cæruleocephala.

„ 362, „ 9, *for* Viliflora *read* Vitiflora.

ZOOLOGICAL GARDENS
1875.
CALCUTTA

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CATALOGUE

Acc no. 487
dt. 13/12/06

BIRDS.

Order II. PASSERIFORMES

(Vol. iii. p. 1).

Suborder I. PASSERES

(Vol. iii. p. 1).

Group II. CICHLOMORPHÆ

(Vol. iv. p. 6).

Family TURDIDÆ.

Bill slender, but rather wide and depressed; wing long and flat, with a very small bastard primary not more than half the length of the second, the latter generally longer than the secondaries. Composed of birds generally migratory.—*Sharpe*, Vol. iv. p. 7.

The family of *Turdidæ*, as defined by Mr. Sharpe in his modifications of Sundevall's classification of the Passeres, in the last volume of the Catalogue of Birds, is an artificial one. It consists of birds belonging to two distinct families, which are separated from each other by structural characters of greater importance (*i. e.* extending in all probability to a remoter geological period) than those which divide either of them from the *Muscicapidæ* and the *Timeliidæ*, as defined in the classification referred to. Under these circumstances I have endeavoured to meet the difficulty by making two provisional subfamilies, which I characterize as follows:—

Sylviinæ. The young in first plumage differ very slightly in colour from the adult, both being generally unspotted both above and below, and the difference being confined to the shade or degree

of colour, which is generally most conspicuous on the underparts. In the rare instances in which the upper parts are spotted in the adult, the spots are less conspicuous in the young birds. In the first autumn before migration, if a partial moult takes place, it is simply a renewal of certain feathers by feathers of the same colour, so that, in winter, birds of the year are generally easily recognizable by a difference of shade in the colour, especially in that of the underparts. This difference, however, is lost in the complete moult which takes place in both adult and young in spring, a moult which usually takes place in March shortly before the spring migration begins. In autumn, usually in September, shortly before the birds return to their winter quarters, a second annual complete moult takes place in adult birds. The autumn plumage is usually intermediate in colour between the spring plumage and that of the bird of the year. Curiously enough, this peculiarity in the colour of the immature bird, and in the subsequent moults which the plumage undergoes, is correlated with the existence of scutellations on the front of the tarsus.

TURDINÆ. The young in first plumage differ from the adult in having the upper and the underparts spotted, whether that is or is not the case in the adult. Instead of two moults in the year, there is only one, in autumn, the spring plumage being obtained by abrasion, or by casting the points of the feathers. Where any feathers have become much worn by the spring, they are replaced by new ones, but nothing approaching a complete moult is observable. Under these circumstances the young birds would have to carry their nestling plumage, or the greater part of it, until the second autumn. To avoid this they have a complete moult, from immature plumage to adult, in their first autumn before they migrate. Consequently the winter plumage of the young and adult is the same, and they can generally only be distinguished by an isolated feather here and there, generally on the wing-coverts or innermost secondaries, which have a pale tip as in the immature plumage. These peculiarities of moulting appear in this group of birds to be always associated with a plain tarsus, except occasionally in very young birds of one or two species.

When sufficient facts have been accumulated to make a classification of the Passeres possible, it is probable that the *Muscicapidæ* and the *Timeliidæ* will be all or most of them absorbed in the families *Turdidæ* and *Sylviidæ*, each of which may be again subdivided into Turdine, Timeliine, and Muscicapine groups of genera or subfamilies.

Subfamily SYLVIINÆ.

Key to the Genera.

a. Tail containing twelve feathers.
a'. Axillaries yellow.
a''. Bill Phylloscopine, more or less dark underneath (see woodcut, page 37). . 2. PHYLLOSCOPUS, p. 37.

b'. Bill Acrocephaline, pale underneath (see woodcut, p. 87).
a'''. Greater wing-coverts with pale tips ..... 2. PHYLLOSCOPUS, p. 37.
b'''. Greater wing-coverts without pale tips ..... 3. HYPOLAIS, p. 75.
b'. Axillaries buff, white, grey, or brown.
c''. Bastard primary considerably less than half the length of the second.
c'''. Bastard primary extending considerably beyond the primary-coverts.
*a*⁴. Bill Acrocephaline, pale underneath. No white on outside tail-feathers ..... 3. HYPOLAIS, p. 75.
*b*⁴. Bill Sylviine, generally with more or less dark underneath (see woodcut, p. 4). Occasionally with white on outside tail-feathers ..... 1. SYLVIA, p. 3.
d'''. Bastard primary not extending beyond the primary-coverts.
*c*⁴. Bill Sylviine, with more or less dark underneath. Tail nearly even ..... 1. SYLVIA, p. 3.
*d*⁴. Bill Acrocephaline or Phylloscopine.
*a*⁵. Outside tail-feathers less than three fourths the length of the longest. Rictal bristles nearly obsolete ..... 5. LOCUSTELLA, p. 107.
*b*⁵. Outside tail-feathers more than three fourths the length of the longest. Rictal bristles fairly developed.
*a*⁶. Outside tail-feathers less than 0·25 inch shorter than the longest. Bill Acrocephaline, pale underneath 3. HYPOLAIS, p. 75.
*b*⁶. Outside tail-feathers more than 0·25 inch shorter than the longest. Bill Acrocephaline or Phylloscopine .. 4. ACROCEPHALUS, p. 87.
d''. Bastard primary half the length of the second or nearly so ..... 6. LUSCINIOLA, p. 120.
b. Tail containing only ten feathers ..... 7. CETTIA, p. 133.

1. SYLVIA.

	Type.
Sylvia, *Scop. Ann.* i. *Hist. Nat.* p. 154 (1769)	S. cinerea ?
Silvia, *Cuvier, Leçons d'Anat. Comp. Sec. Table, Classe des Ois.* (1799)	S. cinerea ?
Curruca, *Koch, Syst. baier. Zool.* p. 153 (1816, *ex Bechstein*)	S. cinerea ?
Melizophilus, *Leach, Cat. Mamm. &c. Brit. Mus.* p. 25 (1816)	S. provincialis.
Aëdon, *Boie, Isis*, 1826, p. 972	S. galactodes.

	Type.
Adophoneus, *Kaup, Natürl. Syst.* p. 28 (1829)	S. orpheus.
Monachus, *Kaup, Natürl. Syst.* p. 33 (1829)	S. atricapilla.
Alsæcus, *Kaup, Natürl. Syst.* p. 108 (1829)	S. subalpina.
Thamnodus, *Kaup, Natürl. Syst.* p. 109 (1829)	S. provincialis.
Epilais, *Kaup, Natürl. Syst.* p. 145 (1829)	S. hortensis.
Erythroleuca, *Kaup, Natürl. Syst.* p. 153 (1829) ..	S. conspicillata.
Nisoria, *Bonap. Comp. List*, p. 15 (1838)	S. nisoria.
Adornis, *Gray, List Gen. B.* p. 29 (1841)	S. hortensis.
Pyrophthalma, *Bonap. Uec. Eur.* p. 37 (1842)	S. melanocephala.
Stoparola, *Bonap. Cat. Pavzud.* p. 6 (1856)	S. subalpina.
Philacantha, *Swinhoe, P. Z. S.* 1871, p. 355 (*ex Gloger*)	S. nisoria.
Atraphornis, *Severtz. Turkest. Jevotn.* p. 65 (1873) ..	S. nana.

Bill of *Sylvia cinerea*, Bechst.

The genus *Sylvia* contains about a score species of birds closely allied to *Phylloscopus*, *Acrocephalus*, and *Hypolais*. In five of the species the bastard primary is so minute that it does not project beyond the primary-coverts, and in none does it project beyond those feathers more than 0·3 inch. The tail is nearly even in two species, in three species the outside feathers are about 0·1 inch shorter than the longest, in four species about 0·2, in four species 0·25, in four species 0·35, and in one 0·4. The bill is shorter and less depressed at the base than in *Phylloscopus*, and the rictal bristles are only slightly developed. The feet and tarsus are stout, and the latter is scutellated in front. The males of many of the species have black heads, and most of the species have white on the outside tail-feathers. Most of the species have the tail shorter than the wing. In two species the tail is slightly longer than the wing, in another species more decidedly longer than the wing, and in two other species the tail is still more lengthened. The centre of distribution of the genus is undoubtedly the basin of the Mediterranean, and several species are resident on its shores. One species is a resident as far north as the south of England; but most of the species are migratory, breeding in Europe and wintering in Africa. Several species extend their range eastwards as far as Turkestan in the breeding-season, wintering in India; and one species at least has been found in China. Most of the species are songsters of greater or less merit.

Key to the Species.

A. Tail shorter than the wing. Subterminal dark transverse band on tail, except two centre feathers. (Subgeneric group AËDONES.)

a. Centre tail-feathers rich chestnut-brown. Back pale chestnut-brown ..... *galactodes*, p. 34.

b. Centre tail-feathers and back greyish brown. *familiaris*, p. 36.

B. Tail shorter than the wing. No subterminal dark band across tail. (Subgeneric group SYLVIÆ.)

c. Length of wing from 3·5 to 2·5 inches. If under 2·5 inches, colour of legs and feet bluish grey.

a'. Bastard primary generally shorter than the primary-coverts, rarely equal in length. Second primary generally equal in length to the third, never shorter than the fifth.

a''. Upper and under tail-coverts barred .. *nisoria*, p. 6.

b''. Upper and under tail-coverts not barred.

a'''. Chin and throat much whiter than the rest of the underparts. Quills, wing-coverts, and especially the innermost secondaries, edged with pale chestnut ..... *cinerea*, p. 8.

b'''. Chin and throat not whiter than the rest of the underparts. Margins of quills, wing-coverts, and innermost secondaries the same colour as the back, but somewhat paler.

*a*⁴. Length of wing 3·5 to 3·0 inches. Head same colour as the back .. *hortensis*, p. 10.

*b*⁴. Length of wing 2·85 to 2·6 inches. Head and throat of male black. Feathers on head of female with darker centres ..... *rueppellii*, p. 12.

b'. Bastard primary longer than the primary-coverts. Second primary equal to or shorter than the fifth.

c''. Length of wing 3·25 to 2·95 inches, culmen 0·76 to 0·6 inch. Chin and throat white. Head of male black.

c'''. Culmen 0·68 to 0·6 inch ..... *orpheus*, p. 14.

d'''. Culmen 0·76 to 0·66 inch ..... *jerdoni*, p. 16.

d''. Length of wing 3·0 to 2·6 inches, culmen 0·58 to 0·5 inch. Chin and throat bluish grey. Head of male black; head of female chestnut-brown ..... *atricapilla*, p. 23.

e''. Length of wing 2·8 to 2·3 inches, culmen 0·56 to 0·4 inch. Chin and throat white. Head bluish grey.

e'''. Back bluish grey, suffused with brown. Length of wing 2·65 to 2·45 inches, culmen 0·51 to 0·44.

*e*⁴. Second primary intermediate in length between the fifth and sixth. *curruca*, p. 16.

*d*⁴. Second primary intermediate in length between the sixth and seventh ..... *affinis*, p. 19.

f'''. Back bluish grey. Length of wing 2·8 to 2·55 inches, culmen 0·56 to 0·51 inch ..... *althea*, p. 19.
g'''. Back pale isabelline brown. Length of wing 2·45 to 2·3 inches, culmen 0·41 inch ..... *minuscula*, p. 20.
d. Length of wing 2·45 to 2·0 inches. Colour of legs and feet brown or pale brown.
e'. Chin white or nearly so.
f'. Head slate-grey or dark slate-grey.
h'''. Innermost secondaries margined with brownish white ..... *mystacea* ♂, p. 20.
i'''. Innermost secondaries margined with bright chestnut ..... *conspicillata* ♂, p. 22.
g''. Head brown or buff.
k'''. Head buff. Centre tail-feathers bright giraffe, contrasting with the brown of the rest of the tail-feathers..... *nana*, p. 26.
l'''. Head brown. Centre tail-feathers brown, scarcely paler than the others.
*e*⁴. Innermost secondaries broadly margined with chestnut ..... *conspicillata* ♀, p. 22.
*f*⁴. Innermost secondaries margined with brownish white.
*a*⁵. Second primary intermediate in length between the sixth and seventh, or seventh and eighth *mystacea* ♀, p. 20.
*b*⁵. Second primary intermediate in length between the fourth and fifth, or fifth and sixth ..... *subalpina* ♀, p. 27.
d'. Chin and breast chestnut..... *subalpina* ♂, p. 27.
e'. Chin and breast dark brown or black, with white edges to the feathers ..... *melanothorax*, p. 28.
C. Tail longer than the wing. (Subgeneric group MELIZOPHILI.)
e. Head brownish black; back brown. Legs and feet bluish grey ..... *blanfordi*, p. 29.
f. Legs pale brown.
k''. Chin and upper throat nearly white .. *melanocephala*, p. 29.
i''. Chin and underparts chestnut-brown .. *provincialis*, p. 31.
k''. Chin and throat grey.
m'''. Breast vinous red ..... *deserticola*, p. 32.
n'''. Breast dark grey..... *sarda*, p. 33.

1. Sylvia nisoria.

Sylvia nisoria (*Bechst.*).
Motacilla nisoria, *Bechst. Naturg. Deutschl.* iv. p. 580, pl. xvii. (1795).
Sylvia nisoria (*Bechst.*), *Bechst. Orn. Taschenb.* i. p. 172 (1802); *Wolf, Taschenb.* i. p. 227 (1810); *Temm. Man. d'Orn.* p. 108 (1815); *id. Man. d'Orn.* i. p. 200 (1820); *Vieill. Faune Franç.* i. p. 223 (1820); *Naum. Vög. Deutschl.* ii. p. 430 (1822); *Roux, Orn. Prov.* p. 341 (1825); *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* fasc. i. p. 18 (1835); *Keys. u. Blas. Wirb. Eur.* p. 189 (1840); *Nord. Demid. Voy. Russ. mérid.* iii. p. 147 (1840); *Werner, Atlas, Insectiv.* pl. 38 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Bp.*

Consp. i. p. 295 (1850); *Cab. Mus. Hein.* i. p. 35 (1850); *Kjærb. Danm. Fugle*, p. 155 (1852); *Sundev. Sv. Fogl.* p. 63, pl. xiii. fig. 3 (1856); *Schl. Dier. Nederl. Vogels*, p. 55 (1861); *Dubois, Ois. Eur.* pl. 64 (1862); *Gray, Hand-l. B.* i. p. 214. no. 3024 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 315 (1869); *Salvad. Faun. Ital. Uce.* p. 99 (1871); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Dresser, B. Eur.* pt. xxx. (1874); *id. Ibis*, 1876, p. 79; *Blanf. East. Pers.* ii. p. 174 (1876).

Curruca nisoria (*Bechst.*), *Koch, Syst. baier. Zool.* i. p. 434 (1816); *Boie, Isis*, 1822, p. 553; *Gould, B. Eur.* ii. pl. 128 (1837); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 242 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 485 (1867); *Doderl. Avif. Sicil.* p. 123 (1869).

Adophoneus nisorius (*Bechst.*), *Kaup, Natürl. Syst.* p. 28 (1829).

Curruca undata, *Brehm, Vög. Deutschl.* p. 414 (1831, *nec Bodd.*).

Curruca undulata, *Brehm, tom. cit.* p. 415 (1831).

Nisoria undata (*Brehm*), *Bp. Comp. List B. Eur. and N. Amer.* p. 15 (1838).

Adophoneus undatus, *Brehm, Naum.* 1855, p. 283.

Adophoneus undulatus, *Brehm, Naum.* 1855, p. 283.

Sylvia (Adophoneus) nisoria (*Bechst.*), *Fritsch, Vög. Eur.* p. 177 (1870).

Philacantha nisoria (*Bechst.*), *Swinh. P. Z. S.* 1871, p. 355; *David et Oust. Ois. Chine*, p. 242 (1877).

In the *adult male in spring plumage* the general colour of the upper parts is brownish grey, browner on the quills, wing-coverts, and innermost secondaries, and slightly greyer on the head, rump, upper tail-coverts, and tail; the wing-coverts, the innermost secondaries, the outside tail-feathers, the feathers of the rump, and the upper tail-coverts, and occasionally the scapulars, forehead, and lower back, are more or less distinctly margined and broadly tipped with greyish white, the pale tips being emphasized by a narrow transverse subterminal dark-brown bar; similar bars are present more or less distinctly on nearly every feather of the under-parts, which are otherwise greyish white, slightly browner on the breast, flanks, thighs, and under tail-coverts; axillaries and under wing-coverts buffish white, generally transversely barred with dark grey; inner margin of quills pale brown. Bill of typical shape, dark brown, the under mandible pale at the base; rictal bristles few and slender. Wing very pointed, the second and third primaries being about equal and longest; bastard primary very minute, falling short of the primary-coverts by about 0·4 inch. Tail shorter than the wing, slightly rounded, the outside feathers being from 0·25 to 0·15 inch shorter than the longest. Legs, feet, and claws pale slaty brown. Length of wing 3·5 to 3·35 inches, tail 3·0 to 2·8, culmen 0·7 to 0·6, tarsus 0·95.

The *female* scarcely differs from the male. *After the autumn moult* the upper parts are slightly browner, and the barring both above and below more distinct. *Birds of the year* are browner both above and below, and the bars on the under surface are generally confined to the under tail-coverts.

The Barred Warbler has a very limited range latitudinally, breeding in Germany, South Sweden, Transylvania, South Russia,

and Turkestan. It passes on migration through the south of France, Italy, Greece, Asia Minor, and Persia. Its winter quarters are unknown, but, as it is said to pass through Nubia in spring and autumn, and has not been recorded from the Transvaal, they are doubtless somewhere in Central Africa.

a, *b*. ♂ ad. sk.	South Sweden, May 21 & 25.	Hr. W. Meves [C.].
c, *d*. Juv. sk.	South Sweden, July 28.	Hr. W. Meves [C.].
e. Juv. sk.	South Sweden, July 25 (*Meves*).	R. B. Sharpe, Esq. [P.].
f. Ad. st.	Sweden.	
g. Ad. sk.	River Elbe.	R. B. Sharpe, Esq. [P.].
h, *i*, *k*. Juv. sk.	Constantinople, Sept. 15 (*Pearce*).	R. B. Sharpe, Esq. [P.].
l. ♂ ad. sk.	Asia Minor (*T. Robson*).	F. Godman and O. Salvin, Esqrs. [P.].
m. ♂ ad. sk.	Palestine.	Canon Tristram [C.].
n. Juv. sk.	Trebizond.	Purchased.
o. Ad. sk.	Kashgar (*Dr. Bellew*).	India Museum.

2. Sylvia cinerea.

Sylvia cinerea, *Bechst.**

La Fauvette grise ou la Grisette, *Briss. Orn.* iii. p. 376 (1760); *Daubent. Pl. Enl.* 579. fig. 3 (1778).

Motacilla sylvia, *Linn. Syst. Nat.* i. p. 330 (1766); *Gmel. Syst. Nat.* i. p. 956 (1788); *Bechst. Naturg. Deutschl.* ii. p. 558 (1795).

La Grisette ou Fauvette grise, *Buff. Hist. Nat. Ois.* v. p. 132 (1778).

? La Fauvette rousse, *Daubent. Pl. Enl.* 581. fig. 1 (1778).

? Motacilla rufa, *Bodd. Tabl. Pl. Enl.* p. 35 (1783, *ex Daubenton*).

Whitethroat, *Lath. Gen. Syn.* ii. p. 428 (1783).

Sylvia communis, *Lath. Gen. Syn. Suppl.* i. p. 287 (1787).

Sylvia cinerea, var. *β*, *Lath. Ind. Orn.* ii. p. 515 (1790).

Sylvia cinerea, *Bechst. Orn. Taschenb.* i. p. 170 (1802); *Wolf, Taschenb.* i. p. 225 (1810); *Temm. Man. d'Orn.* p. 112 (1815); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 172 (1817); *Temm. Man. d'Orn.* i. p. 207 (1820); *Vieill. Faune Franç.* i. p. 220 (1820); *Naum. Vög. Deutschl.* ii. p. 464 (1822); *Roux, Orn. Prov.* p. 338 (1825); *Ménétr. Cat. Rais. Cauc.* p. 34 (1832); *Jenyns, Man. Brit. Vertebr.* p. 109 (1835); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Macgill. Br. B.* ii. p. 350 (1839); *Crespon, Orn. Gard.* p. 130 (1840); *Keys. u. Blas. Wirb. Eur.*

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* According to the Stricklandian code of nomenclature adopted by the British Association, the proper name of the Whitethroat is *Sylvia communis*, Lath. Latham, however, cancelled his own name, and modestly considered our bird a variety only of the phantom continental species, the *Parus cinereus* of Brisson. It being impossible to identify Brisson's bird with any known species of *Sylvia*, Latham's name adopted from Brisson must be entirely ignored, leaving the coast clear for *Sylvia cinerea* of Bechstein. The British Association rules having so generally failed in their object, we may safely violate them in favour of the name in common use. It is possible that Daubenton's plate may have been drawn from a museum skin of a Whitethroat; but it is obvious that he did not intend it for this bird, nor did such an idea ever cross Boddaert's mind. I look upon *Motacilla rufa* of Boddaert as another phantom species, and propose to ignore the name altogether. (*Conf.* Seebohm, 'Ibis,' 1879, p. 311.)

p. 188 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 149 (1840); *Werner, Atlas, Insectiv.* pl. 43 (1842); *Selys-Longch. Faun. Belg.* p. 97 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Bp. Consp.* i. p. 294 (1850); *Cab. Mus. Hein.* i. p. 35 (1850); *Kjærb. Danm. Fugle*, p. 156 (1852); *Sundev. Sv. Fogl.* p. 62, pl. xiii. fig. 1 (1856); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 244 (1859); *Linderm. Vög. Griechenl.* p. 102 (1860); *Schl. Dier. Nederl. Vogels*, p. 56 (1861); *Loche, Expl. Sci. Algér., Ois.* i. p. 240 (1867); *Droste, Vogelw. Borkum*, p. 99 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 307 (1869); *Gray, Hand-l. B.* i. p. 213. no. 3012 (1869); *Blanf. Geol. & Zool. Abyss.* p. 379 (1870); *Fritsch, Vög. Eur.* p. 173 (1870); *Salvad. Faun. Ital. Ucc.* p. 101 (1871); *Shelley & Buckley, Ibis*, 1872, p. 291; *Harting, Handb. Br. B.* p. 16 (1872); *Shelley, B. Egypt*, p. 111 (1872); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Gould, B. Gt. Brit.* ii. pl. lvii. (1873); *Fallon, Ois. Belg.* p. 52 (1875).

Sylvia cineraria, *Bechst. Naturg. Deutschl.* 2nd ed. ii. p. 534 (1807).

Sylvia cinerea (*Bechst.*), var., *Turton, Brit. Faun.* p. 45 (1807).

Curruca cinerea (*Bechst.*), *Koch, Syst. baier. Zool.* i. p. 157 (1816); *Selby, Brit. Orn.* i. p. 213 (1833); *Gould, B. Eur.* ii. pl. 125. fig. 1 (1837); *Thomps. B. Irel.* i. p. 186 (1849); *Degl. et Gerbe, Orn. Eur.* i. p. 480 (1867); *Doderl. Avif. Sicil.* p. 121 (1869).

Curruca sylvia (*Linn.*), *Steph. Shaw's Gen. Zool.* xiii. pt. ii. p. 210 (1826); *Fleming, Brit. An.* p. 71 (1828).

Ficedula cinerea (*Bechst.*), *Blyth, Rennie's Field-Nat.* i. p. 310 (1833).

Sylvia cineracea, *Brehm, Naum.* 1855, p. 283.

Sylvia fruticeti, *Brehm, Naum.* 1855, p. 283.

Sylvia caniceps, *Brehm, Naum.* 1855, p. 283.

Curruca cinerea (*Bechst.*), var. persica, *Filippi, Viagg. Pers.* pp. 162, 348 (1865).

Sylvia affinis, *Blyth apud Salvad. Atti R. Accad. Sci. Tor.* iii. p. 291 (1868).

Sylvia rufa (*Bodd.*) *apud Newt. ed. Yarr. Br. B.* i. p. 406 (1873), *apud Irby, B. Gibr.* p. 87 (1875), *apud Dresser, B. Eur.* pt. l. (1876), *apud Dresser, Ibis*, 1876, p. 79.

In the *adult male in spring plumage* the general colour of the upper parts is greyish brown, darkest on the wings and tail, and shading into ash-grey on the head and upper tail-coverts; wing-coverts and innermost secondaries broadly edged with pale chestnut; outside tail-feathers paler than the rest, and broadly edged with white. Underparts white, purest on the throat and belly, with a vinous tinge on the breast, and shading into buff on the flanks; a white patch on the edge of the wing just below the carpal joint; axillaries and under wing-coverts pale grey, the latter frequently with darker centres; inner margin of quills pale brown. Bill of typical shape, dark brown, the lower mandible pale at the base; rictal bristles only slightly developed. Wing pointed, with the second, third, and fourth primaries nearly equal in length; bastard primary very minute, falling short of the primary-coverts by 0·1 to 0·2 inch. Tail shorter than the wing, the outside feathers about 0·2 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·9 to 2·5 inches, tail 2·7 to 2·3, culmen 0·55 to 0·48, tarsus 0·8.

In the *female* the greyish brown of the back extends also on to the head and upper tail-coverts, and the vinous tinge on the breast is

absent. *After the autumn moult* the male assumes the plumage of the female. In *birds of the year* the colour of the upper parts is still less grey, and almost approaches a dull chestnut-brown.

The Whitethroat, or White-throated Warbler, is the commonest species of the genus, and has an extensive range, breeding throughout the whole of Europe, extending southwards to many of the islands of the Mediterranean, and northwards to within a hundred miles of the Arctic Circle. Eastwards its breeding-range extends to Persia, Western Siberia, and Turkestan. Its winter quarters are Western, Central, and Southern Africa, and probably a few may remain in North Africa to breed.

a, *b*. Ad. st.	Great Britain.	J. Clark, Esq. [C.].
c. Ad. sk.	Middlesex (*O. Salvin*).	F. Godman and O. Salvin, Esqrs. [P.].
d. ♂ ad. sk.	Avington, Hants, May 5.	Edward Shelley, Esq. [P.].
e. ♂ ad. sk.	Pagham, Sussex, Sept. 4.	R. B. Sharpe, Esq. [P.].
f–*h*. Ad.; *i*, *k*. Pull. st.	Cambridgeshire.	Mr. J. Baker [C.].
l. Ad.; *m*. Juv.	Belgium, June.	Brussels Mus. [P.].
n, *o*. ♂ ♀ ad. sk.	S. Sweden, May and June (*Meves*).	R. B. Sharpe, Esq. [P.].
p. ♂ ad. sk.	Valencia, April 17.	Howard Saunders, Esq. [P.].
q. Ad. sk.	Gibraltar.	Col. Irby [P.].
r, *s*. ♂; *t*. ♀ ad. sk.	Palestine.	Canon Tristram [C.].
u. ♂ ad. sk.	E. of Shiraz, 7000 feet, June 3.	W. T. Blanford, Esq. [C.].
v. ♀ ad. sk.	Barna-ool, S.W. Siberia (*Dr. Brehm*).	Geogr. Soc. Bremen.
w. Ad. sk.	Amba, Samhar, N.E. Africa.	W. T. Blanford, Esq. [C.].
x. Ad. sk.	South Africa.	Sir A. Smith [P.].
y. Ad. st.	South Africa.	Sir A. Smith [P.].
z. ♂ ad. sk.	Otuiovapa, Damara Land, Jan. 12 (*C. J. Andersson*).	R. B. Sharpe, Esq.
a', *b'*. Skeleton.	England.	Purchased.

3. Sylvia hortensis.

Sylvia hortensis, *Bechst.**

* The arguments in favour of retaining the name in common use for the Garden-Warbler are precisely the same as those which I have endeavoured to bring forward in the case of the Whitethroat. According to the strict letter of the law, *Sylvia simplex*, Lath., is the name which ought to be used. As before, Latham subsequently ignored his own name, and degraded our bird to the rank of a variety of the *Motacilla hortensis* of Gmelin. The latter species is either the female of the Orphean Warbler, or is a phantom species: if the former, the name must be used for the Orphean Warbler, a step which the most faithful adherents of the Association code have not hitherto adopted; if the latter, the name of *Sylvia hortensis*, Bechst., may be adopted with perfect propriety. The name of *Sylvia salicaria*, Linn., is obviously out of court, inasmuch as, besides the fatal objection of incorrect definition on the part of Linnæus, it would have to stand as Linn. nec Bechst., nec Lath., nec Pallas, nec Wolf, nec Naum., and a host of minor authorities. (*Conf.* Seebohm, 'Ibis,' 1879, p. 312.)

La petite Fauvette, *Briss. Orn.* iii. p. 374 (1760).
? Motacilla salicaria, *Linn. Syst. Nat.* i. p. 330 (1766).
Motacilla hippolais, *Linn. apud Tunstall, Orn. Brit.* p. 2 (1771).
? La Passerinette ou petite Fauvette, *Buff. Hist. Nat. Ois.* v. p. 123 (1778).
? La petite Fauvette, *Daubent. Pl. Enl.* 579. fig. 2 (1778).
Pettychaps, variety, *Lath. Gen. Syn.* ii. pt. 2, p. 413 (1783).
? Motacilla borin, *Bodd. Tabl. Pl. Enl.* p. 35 (1783).
Sylvia simplex, *Lath. Gen. Syn. Suppl.* i. p. 287 (1787); *Donovan, Nat. Hist. Br. B.* vii. pl. cl. (1816).
? Motacilla passerina, *Gmel. Syst. Nat.* i. p. 954 (1788).
? Motacilla hortensis, *Gmel. Syst. Nat.* i. p. 955 (1788, *partim*); *Bechst. Naturg. Deutschl.* iv. p. 550 (1795).
Sylvia hortensis (*Gmel.*), var. β, *Lath. Ind. Orn.* ii. p. 507 (1790).
Greater Pettichaps, *Lath. Gen. Syn. Suppl.* ii. p. 234 (1801).
Sylvia hortensis, *Bechst. Orn. Taschenb.* p. 169 (1802); *Turton, Faun. Brit.* p. 44 (1807); *Wolf, Taschenb.* p. 224 (1810); *Temm. Man. d'Orn.* p. 111 (1815); *Naum. Vög. Deutschl.* ii. p. 478 (1822); *Jenyns, Man. Brit. Vertebr.* p. 108 (1835); *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* fasc. i. p. 19 (1835); *Macgill. Br. B.* ii. p. 345 (1839); *Crespon, Orn. Gard.* p. 131 (1840); *Keys. u. Blas. Wirb. Eur.* p. 189 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 149 (1840); *Selys-Longch. Faun. Belg.* p. 97 (1842); *Werner, Atlas, Insectiv.* pl. 42 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Kjærb. Danm. Fugle*, p. 158 (1852); *Sundev. Sc. Fogl.* p. 63, pl. xiii. fig. 7 (1856); *Linderm. Vög. Griechenl.* p. 103 (1860); *Schl. Dier. Nederl. Vogels*, p. 56 (1861); *Degl. et Gerbe, Orn. Eur.* i. p. 474 (1867); *Doderl. Avif. Sicil.* p. 119 (1869); *Droste, Vogelw. Borkum*, p. 99 (1869); *Gray, Hand-l. B.* i. p. 214. no. 3025 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 310 (1869); *Salvad. Faun. Ital. Ucc.* p. 97 (1871); *Gurney, Anderss. B. Dam. Id.* p. 100 (1872); *Shelley & Buckley, Ibis*, 1872, p. 291; *Harting, Handb. Br. B.* p. 15 (1872); *Fallon, Ois. Belg.* p. 52 (1875).
Curruca hortensis (*Bechst.*), *Koch, Syst. baier. Zool.* i. p. 155 (1816); *Fleming, Brit. An.* p. 70 (1828); *Selby, Brit. Orn.* i. p. 211 (1833); *Gould, B. Eur.* ii. pl. 121 (1837); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Thomps. B. Irel.* i. p. 185 (1849); *Bp. Consp.* i. p. 294 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 240 (1859); *Filippi, Viagg. Pers.* p. 348 (1865); *Loche, Expl. Sci. Algér., Ois.* i. p. 236 (1867); *Sharpe, Cat. Afr. B.* p. 35 (1871); *Shelley, B. Egypt*, p. 104 (1872); *Gould, B. Gt. Br.* ii. pl. lxii. (1873).
Sylvia ædonia, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 162 (1817, *partim*); *Vieill. Faune Franç.* i. p. 221 (1820); *Roux, Orn. Prov.* p. 339 (1825).
Epilais hortensis (*Bechst.*), *Kaup, Natürl. Syst.* p. 145 (1829); *Cab. Mus. Hein.* i. p. 36 (1850).
Curruca brachyrhynchos, *Brehm, Vög. Deutschl.* p. 416 (1831).
Curruca grisea, *Brehm, loc. cit.* (1831, *nec Vieill.*).
Adornis hortensis (*Bechst.*), *Gray, List Gen.* p. 29 (1841).
Sylvia (Curruca) hortensis (*Bechst.*), *Fritsch, Vög. Eur.* p. 170 (1870).
Sylvia salicaria (*Linn.*) *apud Newt. ed. Yarr. Br. B.* i. p. 414 (1873), *apud Irby, B. Gibr.* p. 84 (1875), *apud Dresser, B. Eur.* pt. liii. (1876), *apud Blanf. East. Pers.* ii. p. 174 (1876), *apud Sharpe, ed. Layard's B. S. Afr.* p. 304 (1877).

In the *adult male in spring plumage* the general colour of the

upper parts is olive-brown, darker and greyer on the wings and tail, and slightly paler on the margin of the wing-coverts and innermost secondaries. Underparts greyish white, purest on the belly and on the edge of the wing just below the carpal joint, and shading into pale olive-brown on the breast, flanks, and the centre of the under tail-coverts; axillaries and under wing-coverts buff, the latter with darker centres; inner margin of quills pale brown. Bill of typical shape, dark brown, the lower mandible pale; rictal bristles few and slender. Wing pointed, with the second and third primaries nearly equal in length; bastard primary very minute, not extending as far as the primary-coverts by 0·1 to 0·2 inch. Tail considerably shorter than the wing, nearly even, the outside feathers being scarcely 0·1 inch shorter than the longest. Legs, feet, and claws bluish grey. Length of wing 3·2 to 3·0 inches, tail 2·3 to 2·2, culmen 0·53 to 0·5, tarsus 0·8.

The *female* scarcely differs from the male. *After the autumn moult* the upper parts are more olive and the underparts buffer. *Birds of the year* scarcely differ from adults in autumn plumage.

The breeding-range of the Garden-Warbler scarcely extends northwards as far as the Arctic Circle, and to the east it is bounded by the Ural mountains. This bird breeds in the south of Spain, and only passes on migration through South Italy, Greece, and Asia Minor, but is said to breed in the Jordan valley. It passes through North-east and North-west Africa on migration, wintering probably in Central Africa, and certainly in South Africa.

a, b. Ad. sk.	Devonshire.	Col. Montagu [P.].
c. Ad. st.	Saffron Walden, Essex.	J. Clark, Esq. [P.].
d. Ad. sk.	Cambridge (*Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
e. Ad. sk.	Middlesex (*O. Salvin*).	F. Godman and O. Salvin, Esqrs. [P.].
f. ♂ ad. sk.	Belgium, July 10.	Brussels Mus. [P.].
g. Ad. sk.	Gibraltar.	Col. Irby [P.].
h. Ad. sk.	Palestine.	Canon Tristram [C.].
i. ♂ ad. sk.	Damara Land, Nov. 30 (*C. J. Andersson*).	R. B. Sharpe, Esq.
k, l. Ad. sk.	South Africa.	Sir A. Smith [C.].
m, n, o. Skulls.	S. Germany.	Dr. A. Günther [C.].
p. Skeleton.		Purchased.

4. Sylvia rueppellii.

Sylvia rüppellii, *Temm. Pl. Col.* iii. 245. fig. 1 (1823); *Cretzschm. Rüpp. Atlas*, p. 29, pl. 19 (1826); *Temm. Man. d'Orn.* iii. p. 129 (1835); *Keys. u. Blas. Wirb. Eur.* p. 188 (1840); *Schl. Rev. Crit.* p. 51 (1844); *Gray, Gen. B.* i. p. 174 (1848); *Linderm. Vög. Griechenl.* p. 102 (1860); *Gray, Hand-l. B.* i. p. 213. no. 3019 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 314 (1869); *Dresser, B. Eur.* pt. xxx. (1874).

Sylvia capistrata, *Rüpp. Mus. Senck.* ii. p. 181 (1837).

Curruca rüppellii (*Temm.*), *Gould, B. Eur.* ii. p. 122 (1837); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *id. Consp.* i. p. 294 (1850); *Degl. et Gerbe, Orn. Eur.* i. p. 488 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 235 (1867); *Shelley, B. Egypt*, p. 106 (1872).

Sylvia melandiros, *Linderm. fide Krüper, Journ. Orn.* 1861, p. 279.
Sylvia (Curruca) rüppellii (*Temm.*), *Fritsch, Vög. Eur.* p. 172 (1870).

In the *adult male in spring plumage* the general colour of the upper parts is slate-grey; head nearly black; wings and wing-coverts dark slate-grey, the innermost secondaries edged with buffish brown; tail dark slate-grey, the outside feathers, including their shafts, white, with a dark margin on the basal half of the inside web, becoming broader towards the base; a web of white extends from the tip for nearly an inch on the second outside tail-feathers, and a smaller wedge of white extends for a quarter of an inch on the third feather of the tail on each side; chin and throat black, a narrow white line from the gape towards the shoulder separates the black of the head from the black of the throat; a patch on the edge of the wing below the carpal joint and the whole of the underparts white, shading into buff on the breast and under tail-coverts, and into pale slate-grey on the flanks and thighs; axillaries and under wing-coverts greyish white, the latter with dark centres; inner margin of quills pale brown. Bill of typical shape, very dark brown, the lower mandible pale at the base; rictal bristles nearly obsolete. Wing rather pointed, the second, third, fourth, and fifth primaries nearly equal, the third being slightly the longest; bastard primary v. 7 minute, seldom extending as far as the primary-coverts. Tail shorter than the wing, the outside feathers about 0·25 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·85 to 2·6 inches, tail 2·55 to 2·35, culmen 0·6 to 0·55, tarsus 0·82.

The *female* differs from the male in having the head of the same colour as the back, with dark centres to the feathers, and the throat greyish white. *After the autumn moult* the black feathers of the male on the throat have pale margins. *Birds of the year* of both sexes resemble the female, but have the upper parts browner, and the breast and flanks suffused with pale brown.

Rüppell's Warbler has a very limited range. It breeds in Algiers, Greece, Asia Minor, and Palestine, passes through Egypt on migration, and probably winters in Nubia and Abyssinia.

a, b. ♀ ad. sk.	Smyrna, June 21, July 16 (*Dr. Krüper*).	R. B. Sharpe, Esq.
c. ♂ ad. sk.	Smyrna, April 18 (*Dr. Krüper*).	R. B. Sharpe, Esq.
d. ♂ imm. sk.	Smyrna, Aug. 12 (*Dr. Krüper*).	R. B. Sharpe, Esq.
e. ♂ ad. sk.	Smyrna, April 2 (*Dr. Krüper*).	F. Godman and O. Salvin, Esqrs. [P.].
f. Juv. sk.	Smyrna, July 16 (*Dr. Krüper*).	F. Godman and O. Salvin, Esqrs. [P.].
g. ♂ ad. sk.	Taurus mountains, March 25 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
h. ♂ in first spring moult, sk.	Egypt, April 8 (*Capt. Shelley*).	R. B. Sharpe, Esq.
i. ♂ ad. sk.	Nubia, May (*Stockholm Museum*).	R. B. Sharpe, Esq.

Sylvia orpheus and Sylvia jerdoni.

European examples of this species, with the culmen varying from 0·68 to 0·6 inch, are very distinct from the Indian, Turkestan, and Persian form, with the culmen varying from 0·76 to 0·66, and might possibly be considered distinct species, were it not for the fact that examples from Asia Minor and Palestine are intermediate, with the culmen varying from 0·74 to 0·64. We must therefore admit that the difference between the two forms is only a subspecific one, being completely bridged over by examples from intermediate localities.

The synonymy of the Western and intermediate forms is as follows:—

5. Sylvia orpheus.

Sylvia orpheus, *Temm.**
? La Fauvette, *Briss. Orn.* iii. p. 372 (1760); *Buffon, Hist. Nat. Ois.* v. p. 117 (1778); *Daubent. Pl. Enl.* 579. fig. 1 (1778).
La petite Colombande, *Buff. Hist. Nat. Ois.* v. p. 131 (1778).
Motacilla hippolais, *Linn. apud Bodd. Tabl. des Pl. Enl.* p. 35 (1783).
? Pettychaps (*excl. variety*), *Lath. Gen. Syn.* ii. pt. 2, p. 413 (1783).
Blackcap, var. B, *Lath. Gen. Syn.* ii. pt. 2, p. 416 (1783).
? Motacilla hortensis, *Gmel. Syst. Nat.* i. p. 955 (1788, *partim*).
? Sylvia hortensis (*Gmel.*), (*excl. var. β*), *Lath. Ind. Orn.* ii. p. 507 (1790).
Sylvia atricapilla (*Linn.*), var. γ, *Lath. Ind. Orn.* ii. p. 509 (1790).
Sylvia orphea, *Temm. Man. d'Orn.* p. 107 (1815); *id. Man. d'Orn.* i. p. 198 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 86 (1822); *Naum. Vög. Deutschl.* ii. p. 445 (1822); *Crespon, Orn. Gard.* p. 126 (1840); *Keys. u. Blas. Wirb. Eur.* p. 187 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 148 (1840); *Werner, Atlas, Insectiv.* pl. 37 (1842); *Selys-Longch. Faun. Belg.* p. 90 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Cab. Mus. Hein.* i. p. 36 (1850); *Linderm. Vög. Griechenl.* p. 101 (1860); *Heugl. Orn. N.O.-Afr.* i. p. 309 (1869); *Doderl. Avif. Sicil.* p. 120 (1869); *Gray, Hand-l. B.* i. p. 214. no. 3021 (1869); *Salvad. Faun. Ital. Uec.* p. 100 (1871); *Newt. ed. Yarr. Br. B.* i. p. 423 (1873); *Dresser, B. Eur.* pt. xxx. (1874); *Irby, B. Gibr.* p. 85 (1875).
Sylvia grisea, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 188 (1817); *Vieill. Faune Franç.* i. p. 209 (1820); *Roux, Orn. Prov.* p. 328 (1825).
Curruca orphea (*Temm.*), *Boie, Isis*, 1822, p. 553; *Gould, B. Eur.* ii. pl. 119 (1837); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Bp. Consp.* i. p. 294 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 241 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 479 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 238 (1867); *Shelley, B. Egypt*, p. 104 (1872); *Gould, B. Gt. B.* ii. pl. lxi. (1873).

* The circumstantial evidence in favour of the opinion that "La Fauvette" of Brisson, Buffon, and Daubenton (upon which Gmelin founded his *Motacilla hortensis*) is the female of the Orphean Warbler is very strong. It is not, however, apparently strong enough to induce even the strictest adherents to the Stricklandian code to transfer Gmelin's name to this species. We may therefore ignore the name altogether, and adopt Temminck's name for the Orphean Warbler, leaving also the coast clear for Bechstein's *Motacilla hortensis* to be applied to the Garden Warbler. (*Conf.* Seebohm, 'Ibis,' 1879, p. 310.)

Sylvia crassirostris, *Cretzschm. Rüpp. Atlas*, p. 49, pl. 33. fig. *a* (1826); *Heuglin, Orn. N.O.-Afr.* i. p. 312 (1869); *Gray, Hand-l. B.* i. p. 214. no. 3023 (1869).
Curruca crassirostris (*Cretzschm.*), *Bp. Consp.* i. p. 294 (1850).
Curruca musica, *Brehm, Naum.* 1855, p. 283.
Curruca caniceps, *A. Brehm, fide L. Brehm, Journ. Orn.* 1856, p. 455.
Curruca vidali, *A. Brehm, fide L. Brehm, tom. cit.* p. 455 (1856).
Curruca orphea griseocapilla, *A. E. Brehm, Allg. deutsch. naturh. Zeit.* 1857, p. 464.
Sylvia (Curruca) orphea (*Temm.*), *Fritsch, Vög. Eur.* p. 171 (1870).

In the *adult male in spring plumage* the general colour of the upper parts is dull slate-grey; head to below the eyes sooty black; wings and tail brown; innermost secondaries shading into pale brown on the margins; outside tail-feather on each side white on the outside web, at the apex, and for some distance on the inside web near the shaft, the dark brown of which is thus made conspicuous; the next two feathers on each side have wedge-shaped white spots at the apex. Underparts white, shading into pale greyish brown on the sides of the breast, flanks, thighs, axillaries, under wing-coverts, the centres of the under tail-coverts, and the inner margin of the quills. Bill of typical shape, dark brown, the lower mandible pale at the base; rictal bristles few and small. Wing with the third primary the longest, and the second about equal to the fifth; bastard primary small, sometimes as long as the primary-coverts, and sometimes extending 0·2 beyond them. Tail shorter than the wing, the outside feathers about 0·2 shorter than the longest. Legs, feet, and claws bluish grey. Length of wing 3·25 to 2·95 inches, tail 2·9 to 2·5, culmen 0·68 to 0·6, tarsus 0·9.

The *female* differs from the male in having the head only slightly darker and browner than the back. *After the autumn moult* no important change of plumage is perceptible. *Birds of the year* scarcely differ from the adult, except that both sexes appear in the plumage of the female. *Males after their first spring moult* attain a plumage intermediate between that of the adult male and adult female. In Spanish skins the pale greyish brown of the underparts is replaced by pale buff.

The Western Orphean Warbler breeds throughout Central and Southern Europe and North Africa. Intermediate forms between this and the Eastern subspecies occur in Asia Minor and Palestine. They winter in the valley of the Gambia, and probably in other parts of Central Africa.

a. ♂ ad. sk.	Genoa (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
b, *c*. Ad. sk.	Gibraltar.	Col. Irby [P.].
d. Ad. sk.	Tangiers (*Olcese*).	Col. Irby [P.].
e, *f*. ♀ ad. sk.	Algeria, May 18 (*Salvin*).	F. Godman and O. Salvin, Esqrs. [P.].
g. ♀ ad. sk.	Nubia.	Mons. Verreaux.
h. ♂ ad. sk.	Taurus, Asia Minor, April 22 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
i. ♀ ad. sk.	Syria.	Mons. Verreaux.
k. ♂ imm. sk.	Palestine.	Canon Tristram [C.].

Sylvia orpheus and Sylvia jerdoni.

European examples of this species, with the culmen varying from 0·68 to 0·6 inch, are very distinct from the Indian, Turkestan, and Persian form, with the culmen varying from 0·76 to 0·66, and might possibly be considered distinct species, were it not for the fact that examples from Asia Minor and Palestine are intermediate, with the culmen varying from 0·74 to 0·64. We must therefore admit that the difference between the two forms is only a subspecific one, being completely bridged over by examples from intermediate localities.

The synonymy of the Western and intermediate forms is as follows:—

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Sylvia orpheus, *Temm.**
? La Fauvette, *Briss. Orn.* iii. p. 372 (1760); *Buffon, Hist. Nat. Ois.* v. p. 117 (1778); *Daubent. Pl. Enl.* 579. fig. 1 (1778).
La petite Colombande, *Buff. Hist. Nat. Ois.* v. p. 131 (1778).
Motacilla hippolais, *Linn. apud Bodd. Tabl. des Pl. Enl.* p. 35 (1783).
? Pettychaps (*excl. variety*), *Lath. Gen. Syn.* ii. pt. 2, p. 413 (1783).
Blackcap, var. B, *Lath. Gen. Syn.* ii. pt. 2, p. 416 (1783).
? Motacilla hortensis, *Gmel. Syst. Nat.* i. p. 955 (1788, *partim*).
? Sylvia hortensis (*Gmel.*), (*excl. var. β*), *Lath. Ind. Orn.* ii. p. 507 (1790).
Sylvia atricapilla (*Linn.*), var. γ, *Lath. Ind. Orn.* ii. p. 509 (1790).
Sylvia orphea, *Temm. Man. d'Orn.* p. 107 (1815); *id. Man. d'Orn.* i. p. 198 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 86 (1822); *Naum. Vög. Deutschl.* ii. p. 445 (1822); *Crespon, Orn. Gard.* p. 126 (1840); *Keys. u. Blas. Wirb. Eur.* p. 187 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 148 (1840); *Werner, Atlas, Insectiv.* pl. 37 (1842); *Selys-Longch. Faun. Belg.* p. 90 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Cab. Mus. Hein.* i. p. 36 (1850); *Linderm. Vög. Griechenl.* p. 101 (1860); *Heugl. Orn. N.O.-Afr.* i. p. 309 (1869); *Doderl. Avif. Sicil.* p. 120 (1869); *Gray, Hand-l. B.* i. p. 214. no. 3021 (1869); *Salvad. Faun. Ital. Ucc.* p. 100 (1871); *Newt. ed. Yarr. Br. B.* i. p. 423 (1873); *Dresser, B. Eur.* pt. xxx. (1874); *Irby, B. Gibr.* p. 85 (1875).
Sylvia grisea, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 188 (1817); *Vieill. Faune Franç.* i. p. 209 (1820); *Roux, Orn. Prov.* p. 328 (1825).
Curruca orphea (*Temm.*), *Boie, Isis*, 1822, p. 553; *Gould, B. Eur.* ii. pl. 119 (1837); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Bp. Consp.* i. p. 294 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 241 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 479 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 238 (1867); *Shelley, B. Egypt*, p. 104 (1872); *Gould, B. Gt. B.* ii. pl. lxi. (1873).

* The circumstantial evidence in favour of the opinion that "La Fauvette" of Brisson, Buffon, and Daubenton (upon which Gmelin founded his *Motacilla hortensis*) is the female of the Orphean Warbler is very strong. It is not, however, apparently strong enough to induce even the strictest adherents to the Stricklandian code to transfer Gmelin's name to this species. We may therefore ignore the name altogether, and adopt Temminck's name for the Orphean Warbler, leaving also the coast clear for Bechstein's *Motacilla hortensis* to be applied to the Garden Warbler. (*Conf.* Seebohm, 'Ibis,' 1879, p. 310.)

Sylvia crassirostris, *Cretzschm. Rüpp. Atlas*, p. 49, pl. 33. fig. *a* (1826); *Heuglin, Orn. N.O.-Afr.* i. p. 312 (1869); *Gray, Hand-l. B.* i. p. 214. no. 3023 (1869).
Curruca crassirostris (*Cretzschm.*), *Bp. Consp.* i. p. 294 (1850).
Curruca musica, *Brehm, Naum.* 1855, p. 283.
Curruca caniceps, *A. Brehm, fide L. Brehm, Journ. Orn.* 1856, p. 455.
Curruca vidali, *A. Brehm, fide L. Brehm, tom. cit.* p. 455 (1856).
Curruca orphea griseocapilla, *A. E. Brehm, Allg. deutsch. naturh. Zeit.* 1857, p. 464.
Sylvia (Curruca) orphea (*Temm.*), *Fritsch, Vög. Eur.* p. 171 (1870).

In the *adult male in spring plumage* the general colour of the upper parts is dull slate-grey; head to below the eyes sooty black; wings and tail brown; innermost secondaries shading into pale brown on the margins; outside tail-feather on each side white on the outside web, at the apex, and for some distance on the inside web near the shaft, the dark brown of which is thus made conspicuous; the next two feathers on each side have wedge-shaped white spots at the apex. Underparts white, shading into pale greyish brown on the sides of the breast, flanks, thighs, axillaries, under wing-coverts, the centres of the under tail-coverts, and the inner margin of the quills. Bill of typical shape, dark brown, the lower mandible pale at the base; rictal bristles few and small. Wing with the third primary the longest, and the second about equal to the fifth; bastard primary small, sometimes as long as the primary-coverts, and sometimes extending 0·2 beyond them. Tail shorter than the wing, the outside feathers about 0·2 shorter than the longest. Legs, feet, and claws bluish grey. Length of wing 3·25 to 2·95 inches, tail 2·9 to 2·5, culmen 0·68 to 0·6, tarsus 0·9.

The *female* differs from the male in having the head only slightly darker and browner than the back. *After the autumn moult* no important change of plumage is perceptible. *Birds of the year* scarcely differ from the adult, except that both sexes appear in the plumage of the female. *Males after their first spring moult* attain a plumage intermediate between that of the adult male and adult female. In Spanish skins the pale greyish brown of the underparts is replaced by pale buff.

The Western Orphean Warbler breeds throughout Central and Southern Europe and North Africa. Intermediate forms between this and the Eastern subspecies occur in Asia Minor and Palestine. They winter in the valley of the Gambia, and probably in other parts of Central Africa.

a. ♂ ad. sk.	Genoa (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
b, *c*. Ad. sk.	Gibraltar.	Col. Irby [P.].
d. Ad. sk.	Tangiers (*Olcese*).	Col. Irby [P.].
e, *f*. ♀ ad. sk.	Algeria, May 18 (*Salvin*).	F. Godman and O. Salvin, Esqrs. [P.].
g. ♀ ad. sk.	Nubia.	Mons. Verreaux.
h. ♂ ad. sk.	Taurus, Asia Minor, April 22 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
i. ♀ ad. sk.	Syria.	Mons. Verreaux.
k. ♂ imm. sk.	Palestine.	Canon Tristram [C.].

The synonymy of the Eastern form is as follows:—

6. Sylvia jerdoni.

Sylvia jerdoni (*Blyth*).
Curruca orphea (*Temm.*), β. helena, *Hempr. et Ehr. Symb. Phys. Aves*, fol. cc (1833).
Philomela orphea (*Temm.*) *apud Jerdon, Madras Journ.* x. p. 267 (1839).
Curruca jerdoni, *Blyth, J. A. S. Beng.* xvi. p. 439 (1847).
Sylvia jerdoni (*Blyth*), *Blyth, Cat. B. Mus. As. Soc.* p. 187 (1849); *Bp. Consp.* i. p. 294 (1850); *Gray, Hand-l. B.* i. p. 214. no. 3022 (1869); *Blanf. East. Pers.* ii. p. 172 (1876).
Artamus cucullatus, *Nicholson, P. Z. S.* 1851, p. 195, pl. xliii.
Sylvia orphea, *Temm. apud Jerd. B. Ind.* ii. p. 208 (1863).

This form differs from the preceding only in the length of the bill, the measurements of which have been already given, and in the fact that it does not appear ever to have the buff underparts which are characteristic of Spanish examples.

The Eastern Orphean Warbler breeds in Persia and Turkestan, and winters in India and Arabia.

a, *b*. ♂ ♀ ad. sk.	E. of Shiraz, S. Persia, 7000 ft., June 1.	W. T. Blanford, Esq. [C.].
c, *d*. Ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
e. Ad. sk.	Madras.	Sir W. Elliot [P.].

Sylvia curruca, Sylvia affinis, and Sylvia althea.

This is an excellent example of a species in the process of breaking up into three species. Typical examples of each present excellent characters, and have fairly well-defined geographical limits. Unfortunately, however, for the student who is anxious to define his species with greater accuracy than Nature has hitherto succeeded in accomplishing the task, intermediate forms occur, and individuals do not always recognize their geographical limits as most species do. As Hume very justly observes, this is a case in which some ornithologists will treat the birds as three species, whilst others will consider them to be only three races of one somewhat variable species. I prefer to treat them as subspecies, adopting the provisional hypothesis that the intermediate forms are the result of the interbreeding of the different races.

The synonymy of the European form is as follows:—

7. Sylvia curruca.

Sylvia curruca (*Linn.*).
La Fauvette babillarde, *Briss. Orn.* iii. p. 384 (1760); *Buffon, Hist. Nat. Ois.* v. p. 135 (1778); *Daubent. Pl. Enl.* 580. fig. 3 (1778).

Motacilla curruca, *Linn. Syst. Nat.* i. p. 329 (1766); *Gmel. Syst. Nat.* i. p. 954 (1788); *Bechst. Naturg. Deutsch.* iv. p. 564 (1795).
? Motacilla dumetorum, *Linn. Syst. Nat.* i. p. 334 (1766).
Sylvia curruca (*Linn.*), *Scop. Ann.* i. p. 155 (1769); *Lath. Ind. Orn.* ii. pt. 2, p. 509 (1790); *Bechst. Orn. Taschenb.* i. p. 171 (1802); *Temm. Man. d'Orn.* p. 113 (1815); *Leach, Cat. Mamm. Brit. Mus.* p. 23 (1816); *Vieill. Faune Franç.* i. p. 205 (1820); *Temm. Man. d'Orn.* i. p. 209 (1820); *Naum. Vög. Deutschl.* ii. p. 451 (1822); *Roux, Orn. Prov.* p. 332 (1825); *Ménétr. Cat. Rais. Cauc.* p. 34 (1832); *Jenyns, Man. Brit. Vertebr.* p. 109 (1835); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Crespon, Orn. Gard.* p. 133 (1840); *Keys. u. Blas. Wirb. Eur.* p. 187 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 148 (1840); *Werner, Atlas, Insectiv.* pl. 44 (1842); *Selys-Longch. Faun. Belg.* p. 97 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Bp. Consp.* i. p. 293 (1850); *Kjærb. Danm. Fugle*, p. 156 (1852); *Sundev. Sv. Fogl.* p. 62, pl. xiii. fig. 2 (1856); *Linderm. Vög. Griechenl.* p. 101 (1860); *Schl. Dier. Nederl. Vogels*, p. 56 (1861); *Radde, Reis. Sibir., Vög.* ii. p. 259 (1863); *Loche, Expl. Sci. Algér., Ois.* p. 239 (1867); *Droste, Vogelw. Borkum*, p. 99 (1869); *Gray, Hand-l. B.* i. p. 213. no. 3013 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 308 (1869); *Fritsch, Vög. Eur.* p. 174 (1870); *Salvad. Faun. Ital. Ucc.* p. 100 (1871); *Shelley, B. Egypt*, p. 101 (1872); *Newt. ed. Yarr. Br. B.* i. p. 410 (1873); *Irby, B. Gibr.* p. 86 (1875); *Fallon, Ois. Belg.* p. 53 (1875); *Dresser, B. Eur.* pt. xlviii. (1876).
Babbling Warbler, *Lath. Gen. Syn.* ii. pt. 2, p. 417 (1783).
? White-breasted Warbler, *Lath. Gen. Syn.* ii. pt. 2, p. 447 (1783).
Sylvia sylviella, *Lath. Gen. Syn. Suppl.* i. p. 287 (1787); *Lath. Ind. Orn.* ii. p. 515 (1790); *Turton, Brit. Faun.* p. 45 (1807); *Leach, Cat. Mamm. Brit. Mus.* p. 23 (1816); *Harting, Handb. Br. B.* p. 16 (1872).
? Sylvia dumetorum, *Lath. Ind. Orn.* ii. p. 522 (1790).
Lesser Whitethroat, *Lath. Gen. Syn. Suppl.* ii. p. 239 (1801).
Motacilla sylviella (*Lath.*), *Turton, Linn. Gen. Syst. Nat.* i. p. 588 (1806).
Sylvia garrula, *Bechst. Naturg. Deutschl.* 2nd ed. ii. p. 540 (1807); *Wolf, Taschenb.* i. p. 226 (1810); *Bechst. Orn. Taschenb.* pt. iii. p. 561 (1812); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 165 (1817); *Macgill. Br. B.* ii. p. 357 (1839).
Curruca garrula (*Bechst.*), *Koch, Syst. baier. Zool.* i. p. 157 (1816); *Selby, Brit. Orn.* i. p. 215 (1833); *Gould, B. Eur.* ii. pl. 125 (1837); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 243 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 477 (1867); *Doderl. Avif. Sicil.* p. 120 (1869).
Curruca sylviella (*Lath.*), *Fleming, Brit. An.* p. 71 (1828).
Curruca dumetorum (*Linn.*), *Brehm, Vög. Deutschl.* p. 422 (1831).
Curruca molaria, *Brehm, loc. cit.* (1831).
Ficedula garrula (*Bechst.*), *Blyth, Rennie's Field Nat.* i. p. 352 (1833).

Curruca superciliaris,
Curruca septentrionalis,
Curruca assimilis,
Curruca obscura,
} *Brehm, Vogelf.* p. 228 (1855).

Sylvia molaria,
Sylvia septentrionalis,
Sylvia assimilis,
Sylvia obscura,
Sylvia superciliaris,
} *Brehm, Naum.* 1855, p. 283.

In the *adult male in spring plumage* the general colour of the upper parts is pale slate-grey, more or less suffused with brown on the back, lores, and ear-coverts; eye-stripe almost obsolete; innermost secondaries with paler edges; wings and tail brown on outside feathers. Underparts white on the chin, throat, centre of belly, and under tail-coverts, shading into very pale brown on the breast and flanks; axillaries and under wing-coverts white; inner margin of quills pale buffish grey. Bill of typical shape, dark bluish grey, the under mandible pale at the base; rictal bristles few and slender. Wing with the third and fourth primaries nearly equal and longest; second primary generally intermediate in length between the fifth and sixth, in very rare instances between the sixth and seventh; bastard primary extending beyond the primary-coverts from 0·03 to 0·2 inch. Tail shorter than the wing; the outside feathers 0·15 to 0·2 inch shorter than the longest. Legs, feet, and claws bluish grey. Length of wing 2·65 to 2·45 inches, tail 2·4 to 2·2, culmen 0·51 to 0·44, tarsus 0·76.

The *female* scarcely differs from the male, but has not even the rudiments of an eye-stripe. *After the autumn moult* the breast and flanks are somewhat more suffused with brown. *Birds of the year* have the upper parts more suffused with brown, and the pale brown of the underparts extends to the under tail-coverts. The bill and legs are also somewhat paler. *After the first autumn moult* the back is greyer.

The European form of the Lesser Whitethroat, or Lesser Whitethroated Warbler, breeds throughout Europe, extending northwards beyond the Arctic Circle almost to the limit of forest-growth, and southwards to the Mediterranean. It winters in the southern portion of North Africa (Nubia, Abyssinia, &c.). Occasionally examples from Siberia and India agree in wing-formula &c. with the European form. Examples from Egypt, Palestine, and Asia Minor agree in colour and size with small specimens of the Himalayan form.

a, *b*. Ad. sk.	South England.	F. Godman and O. Salvin, Esqrs. [P.].
c. Ad. st.	Near London.	W. Yarrell, Esq. [P.].
d. Ad. sk.	Surbiton, Surrey, Aug. 10.	Dr. A. Günther [P.].
e, *f*. ♂ ad. sk.	Cookham, Berks, July 30, Aug. 29.	R. B. Sharpe, Esq. [P.].
g, *h*. Ad.; *i*. Pull. sk.	Cambridgeshire.	Mr. J. Baker [C.].
k. ♀ ad. sk.	Taurus mountains, Asia Minor, Mar. 25 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
l. Ad. sk.	Syria.	Dr. Staudinger [C.].
m. ♂, *n*. ♀ ad. sk.	Palestine.	Canon Tristram [C.].
o. Ad. sk.	Egypt, March 1.	J. H. Gurney, jun. [P.].
p. Ad. sk.	Egypt (*Dr. Christie*).	G. Turnbull, Esq. [P.].
q. ♂ ad. sk.	Nubia.	Dr. Leith Adams [P.].
r. Ad. sk.	Egyptian Nubia (*Verreaux*).	R. B. Sharpe, Esq.
s. Skeleton.		Purchased.

The synonymy of the Siberian form is as follows:—

8. Sylvia affinis.

Motacilla sylvia (*Linn.*), *apud Pall. Zoogr. Rosso-Asiat.* i. p. 488 (1811).
Sylvia sylviella (*Lath.*), *apud Sykes, P. Z. S.* 1832. p. 89.
Sylvia garrula (*Bechst.*), *apud Eversm. Add. Pall. Zoogr. Rosso-Asiat.* fasc. i. p. 21 (1835).
Curruca garrula (*Bechst.*), *apud Jerdon, Madr. Journ.* x. p. 269 (1839), *apud Taez. Bull. Soc. Zool. France*, i. p. 142 (1876).
Curruca sylviella (*Lath.*), *apud Blyth, J. A. S. Beng.* xiv. p. 564 (1845).
Sylvia affinis, *Blyth, Cat. B. Mus. As. Soc.* p. 187 (1849); *Hume, Stray Feath.* vii. p. 60 (1878).
Pyrophthalma affinis (*Blyth*), *Bp. Consp.* i. p. 293 (1850).
Sylvia curruca (*Linn.*), *apud Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 344 (1854), *apud Jerdon, B. Ind.* ii. p. 209 (1863), *apud Swinh. P. Z. S.* 1871, p. 355, *apud Severtz. Turkest. Jevotn.* p. 65 (1873), *apud Hume & Henders. Lahore to Yark.* p. 221 (1873), *apud Blanf. East. Pers.* ii. p. 175 (1876), *apud Prjev. Roxley's Orn. Misc.* ii. p. 170 (1877), *apud David et Oust. Ois. Chine*, p. 240 (1877).
Sterparola curruca (*Linn.*), *apud Hume, Nests & Eggs Ind. B.* pt. ii. p. 373 (1874).
Sylvia curruca (*Linn.*), subsp. affinis *Blyth, Seebohm, Ibis*, 1879, p. 8.

This is an Eastern form. Differs from the typical species only in having the second primary generally intermediate in length between the sixth and seventh, in rare instances between the seventh and eighth; in all other respects (size &c.) it does not differ from the Western form.

The Siberian form of the Lesser Whitethroat breeds throughout Siberia, extending northwards almost to the limit of forest-growth, and southwards into North Persia, Turkestan, and North-east China. It winters in Baluchistan and the whole of India and Ceylon. Examples occasionally occur in Europe which agree in wing-formula &c. with the Eastern form.

a. ♂ ad. sk.	Yenesay, lat. 66½°, June 26, 1877.	Henry Seebohm, Esq. [P.].
b. ♂ ad. sk.	Malo-Atlim, Obb, W. Siberia, July 7 (*Dr. Finsch*).	Bremen Geogr. Soc.
c. Ad. sk.	India.	Sec. of State for India [P.].
d. Ad. sk.	N.W. India.	Capt. Stackhouse Pinwill [P.].
e. Ad. sk.	Shikapore, Afghanistan.	Sec. of State for India [P.].
f. ♀ ad. sk.	Banda, Bundelkund, Dec. 16 (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
g. ♂ ad. sk.	Murshedabad, Nov. 1 (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
h. ♂ ad. sk.	Agra, Feb. 10 (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
i. ♂ ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
k. Ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
l, *m*, *n*. Ad. sk.	Kashgar (*Dr. Bellew*).	India Museum.

The synonymy of the Himalayan form is as follows:—

9. Sylvia althea.

Curruca cinerea (*Lath.*), *apud Jerdon, Madras Journ.* x. p. 268 (1839).
Sylvia affinis, *Blyth, apud Jerdon, B. Ind.* ii. p. 209 (1863), *apud Legge, Birds of Ceylon*, p. 538 (1879).
Sylvia althea, *Hume, Stray Feath.* vii. p. 60 (1878).

This is a Himalayan form, differing from the European species in having the upper parts an almost uniform bluish grey, the back being suffused with brown to an all but imperceptible extent. The second primary is intermediate in length between the sixth and seventh, or seventh and eighth. It is on an average a larger bird than the Western form. Length of wing 2·8 to 2·55 inches, tail 2·5 to 2·25, culmen 0·56 to 0·51, tarsus 0·8 to 0·75.

The Himalayan form of the Lesser Whitethroat breeds abundantly in the extreme north-west of Cashmere, and winters in the north-west provinces of India.

a. ♂ ad. sk.	Gilgit, Cashmere, Aug. 26, 1879.	Dr. Scully [P.].
b. Ad. sk.	Gilgit, Cashmere, May 8, 1879.	Dr. Scully [P.].

10. Sylvia minuscula. (Plate I.)

Sylvia minula, *Hume, Stray Feath.* i. p. 198 (1873), vii. p. 58 (1878).
Sylvia minuscula, *Hume, Stray Feath.* viii. p. 103 (1879).

This species differs from its near allies in having the forehead and crown of a pale bluish-grey colour, gradually shading into the colour of the back, which is a pale isabelline brown. It is a small bird, the length of wing varying from 2·45 to 2·3 inches. A male in the collection measures—wing 2·43 inches, tail 2·22, culmen 0·41. The exposed portion of the bastard primary measures 0·45 inch, and the second primary is equal to the seventh; in other skins it is said to be intermediate in length between the seventh and eighth. The outside feathers of the tail are 0·2 inch shorter than the longest.

Hume's Lesser Whitethroat breeds in Afghanistan, and winters in Baluchistan, Scinde, and North-western India.

a. ♂ ad. sk.	Dasht River, Baluchistan, Jan. 26, 1872.	W. T. Blanford, Esq. [C.].
b. Ad. sk.	Shikapore, Afghanistan (*W. Griffith*).	India Museum.

11. Sylvia mystacea.

Sylvia mystacea, *Ménétr.**
Sylvia melanocephala (*Gmel.*), *apud Licht. Verz. Doubl. Zool. Mus.*

* Hemprich and Ehrenberg's diagnosis of *Curruca momus* does not contain a single character by which this species may be distinguished from *Sylvia melanocephala*; and had it not been for the present existence of the type in the Berlin Museum, no one could have suspected that their species was identical with the one so excellently defined by Ménétriés. The rejection of Ménétriés's name in favour of that of Hemprich and Ehrenberg is in direct defiance of the Stricklandian code, which in this instance appears to me to be based upon strict justice and common sense.

J.G.Keulemans del. Mintern Bros. imp.

Sylvia minuscula.

Univ. Berl. p. 34 (1823), *apud Dress. & Blanf. Ibis*, 1874, p. 340, *apud Dresser, B. Eur.* pt. xxxiii. (1874).
Curruca momus, *Hempr. et Ehr. Symb. Phys. Av.* i. fol. bb (1833).
Sylvia mystacea, *Ménétr. Cat. Rais. Cauc.* p. 34 (1832); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Dresser, Ibis*, 1876, p. 80.
Melizophilus nigricapillus, *Cab. Mus. Hein.* i. p. 35 (1850).
Sylvia bowmani, *Tristram, Ibis*, 1867, p. 85; *Gray, Hand l. B.* i. p. 212. no. 3002 (1869).
Sylvia nigricapilla (*Cab.*), *Gray, Hand-l. B.* i. p. 212. no. 3005 (1869).
Sylvia melanocephala minor, *Heugl. Orn. N.O.-Afr.* i. p. 303 (1869).
Sylvia melanocephala Nubiæ, *Licht. fide Heugl. Orn. N.O.-Afr.* i. p. 303 (1869).
Sylvia rubescens, *Blanf. Ibis*, 1874, p. 77; *id. East. Pers.* ii. p. 177, pl. xii. (1876).
Pyrophthalma mystacea (*Ménétr.*), *Severtz. Stray Feath.* 1875, p. 428.
Sylvia momus (*Hempr. et Ehr.*), *Dresser, B. Eur.* pt. lxxix. (1880).

In the *adult male in spring plumage* the head and cheeks are dark slate-grey, approaching black, fading into light slate-grey on the rest of the upper parts; the quills are brown, the innermost secondaries margined with brownish white; the tail is dark brown, with the outside web and the tip for some length of the inside web of the outer feather on each side white; more or less white on the tips of the next feathers. Underparts white, with an isabelline tint on the breast and flanks; axillaries and under wing-coverts pinkish white; inner margin of quills pale brown. Bill of typical shape, dark brown, the under mandible pale at the base; rictal bristles few and slender. Wing with the fourth and fifth primaries longest; second primary intermediate in length between the sixth and seventh, or seventh and eighth; bastard primary extending 0·15 inch beyond the primary-coverts. Tail shorter than the wing, outside feathers 0·35 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·42 to 2·05 inches, tail 2·32 to 1·98, culmen 0·5 to 0·45, tarsus 0·75.

The *female* differs from the male in having the upper parts a nearly uniform sandy or buffish brown, somewhat darker and greyer on the head, and in having the underparts more suffused with isabelline. *After the autumn moult* the brown of the upper parts of the female is darker (less sandy), and the breast and flanks are also slightly darker in colour. *The winter plumage of the adult male* appears to be unknown. What I take to be *males in first winter plumage* resemble the adult female at the same season, but have nearly black centres to the feathers on the crown and ear-coverts.

But little is known of the geographical distribution of Bowman's Warbler. It breeds in Persia, and is apparently a resident in Palestine, and probably also in Abyssinia.

a. ♂, *b*. ♀ ad. sk.	Shiraz, S. Persia, 4800 ft., June 12.	W. T. Blanford, Esq. [C.]. (Types of *Sylvia rubescens*, Blanf.)
c. Ad. sk.	North Africa.	Purchased.

12. Sylvia conspicillata.

Sylvia conspicillata, *Marm. fide Temm. Man. d'Orn.* i. p. 210 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 88 (1822); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Crespon, Orn. Gard.* p. 134 (1840); *Keys. u. Blas. Wirb. Eur.* p. 186 (1840); *Werner, Atlas, Insectiv.* pl. 44 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Bp. Consp.* i. p. 294 (1850); *Cab. Mus. Hein.* i. p. 35 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 245 (1859); *Linderm. Vög. Griechenl.* p. 99 (1860); *Dubois, Ois. Eur.* pl. 68 (1862); *Gray, Hand-l. B.* i. p. 212. no. 3007 (1869); *Fritsch, Vög. Eur.* p. 175 (1870); *Salvad. Faun. Ital. Ucc.* p. 101 (1871); *Shelley, B. Egypt*, p. 109 (1872); *Dresser, B. Eur.* pt. xliv. (1875); *Irby, B. Gibr.* p. 87 (1875); *Blanf. East. Pers.* ii. p. 179 (1876).

Sylvia passerina (*Gmel.*), *apud Temm. Man. d'Orn.* i. p. 213 (1820), *apud Vieill. Faune Franç.* i. p. 206 (1820), *apud Meyer, Taschenb. Zus. u. Ber.* p. 89 (1822), *apud Roux, Orn. Prov.* p. 334 (1825).

Curruca conspicillata (*Marm.*), *Boie, Isis*, 1822, p. 553; *Gould, B. Eur.* ii. pl. 126 (1837); *Degl. et Gerbe, Orn. Eur.* i. p. 484 (1867); *Doderl. Avif. Sicil.* p. 122 (1869).

Curruca passerina (*Gmel.*), *apud Boie, Isis*, 1822, p. 553.

Erythroleuca passerina (*Gmel.*), *apud Kaup, Natürl. Syst.* p. 153 (1829).

Sylvia icterops, *Ménétr. Cat. Rais. Caucc.* p. 34 (1832); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Schl. Rev. Crit.* p. 51 (1844); *Gray, Gen. B.* i. p. 174 (1848).

Stoparola conspicillata (*Marm.*), *Bp. Cat. Parzud.* p. 6 (1856); *Loche, Expl. Sci. Algér., Ois.* p. 242 (1867).

In the *adult male in breeding-plumage* the head to below the eye is slate-grey, gradually shading into greyish chestnut on the centre of the back, and shading again into paler slate-grey on the rump and upper tail-coverts; the wings and wing-coverts are dark brown, the primaries narrowly edged, and the wing-coverts and innermost secondaries broadly edged with chestnut; the tail-feathers are dark brown, the two centre ones slightly greyer than the rest, and the two outside ones white from their apices as far as a line drawn from the base of the outer web to the centre of the margins of the inside web; the second outside feather on each side has a terminal wedge-shaped white patch, extending a quarter of an inch from the apex; the chin is white, gradually fading into pale slate-grey on the throat, which fades into vinous red on the breast and flanks, leaving the centre of the belly and the under tail-coverts nearly white; axillaries and under wing-coverts vinous red; inner margin of quills pale grey, with a slight chestnut tint. Bill of typical shape, dark brown, the under mandible pale at the base; rictal bristles few and slender. Wing with the third and fourth primaries nearly equal and longest; second primary intermediate in length between the fifth and sixth, or sixth and seventh; bastard primary small, but usually extending 0·1 inch beyond the primary-coverts, in rare instances equal to them, and occasionally extending beyond them 0·2. Tail shorter than the wing, considerably rounded, the outside feathers varying from 0·2 to 0·4 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·3 to 2·0 inches, tail 2·1 to 1·9, culmen 0·48 to 0·4, tarsus 0·73.

The *female* differs from the male in having the head, back, rump, and upper tail-coverts of a uniform reddish brown, causing the chestnut margins of the innermost secondaries to appear duller from want of contrast. In the underparts of the female the pale slate-grey of the throat and the vinous red of the breast and flanks are replaced by pale buffish brown. *After the autumn moult* the upper parts of the male are of a richer brown, which appears also on the tips of the slaty-grey feathers of the crown and rump. The upper parts of the female are also slightly richer in colour. There appears to be no change in the colour of the underparts in either sex. *Young in first plumage* of both sexes scarcely differ from the female in autumn plumage.

The Spectacled Warbler may be said almost to be confined to the basin of the Mediterranean, extending westwards as far as the Canary Islands and eastwards to Palestine. On the European coast it appears to be only a summer visitor, but on many of the islands and on the African coast it is said to be a resident.

a, *b*. ♂ ad. sk.	Sardinia, Mar. 6, April 24 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
c. Ad. sk.	Palestine.	Canon Tristram [C.].
d. ♀ ad. sk.	Algeria, May (*O. Salvin*).	F. Godman and O. Salvin, Esqrs. [P.].
e. Ad. sk.	Tangier (*Favier*).	Purchased.
f. ♂ ad. sk.	Teneriffe, April 8 (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
g. ♀ ad. sk.	St. Vincent, Cape-Verd Isles, May 11.	Capt. Legge [P.].
h. Ad. sk.	S. Iago, Cape-Verd Isles.	Sir W. Burnett and Admiral Fitzroy [P.].

13. Sylvia atricapilla.

La Fauvette à teste noire, *Briss. Orn.* iii. p. 380 (1760).

Motacilla atricapilla, *Linn. Syst. Nat.* i. p. 332 (1766); *Bechst. Naturg. Deutschl.* iv. p. 540 (1795).

Sylvia atricapilla (*Linn.*), *Scop. Ann.* i. p. 156 (1769); *Lath. Ind. Orn.* ii. p. 508 (1790); *Bechst. Orn. Taschenb.* p. 168 (1802); *Wolf, Taschenb.* i. p. 223 (1810); *Temm. Man. d'Orn.* p. 109 (1815); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 224 (1817); *Leach, Syst. Cat. Mamm. Brit. Mus.* p. 25 (1816); *Temm. Man. d'Orn.* i. p. 201 (1820); *Vieill. Faune Franç.* i. p. 207 (1820); *Naum. Vög. Deutschl.* ii. p. 492 (1822); *Roux, Orn. Prov.* p. 331 (1825); *Ménétr. Cat. Rais. Cauc.* p. 33 (1832); *Jenyns, Man. Brit. Vertebr.* p. 108 (1835); *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* fasc. iii. p. 16 (1835); *Macgill. Br. B.* ii. p. 339 (1839); *Crespon, Orn. Gard.* p. 128 (1840); *Keys. u. Blas. Wirb. Eur.* p. 188 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 150 (1840); *Selys-Longch. Faun. Belg.* p. 93 (1842); *Werner, Atlas, Insectiv.* pl. 39 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Kjærb. Danm. Fugle*, p. 157 (1852); *Sundev. Sv. Fogl.* p. 65, pl. xiii. figs. 5, 6 (1856); *Linderm. Vög. Griechenl.* p. 102 (1860); *Schl. Dier. Nederl. Vogels*, p. 55 (1861); *Degl. et Gerbe, Orn. Eur.* i. p. 473 (1867); *Doderl. Avif. Sicil.* p. 119 (1869); *Droste, Vogelw.*

Borkum, p. 99 (1869); *Gray, Hand-l. B.* i. p. 213. no. 3017 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 310 (1869); *Godman, Azores*, p. 24 (1870); *Salvad. Faun. Ital. Ucc.* p. 98 (1871); *Harting, Handb. Br. B.* p. 15 (1872); *Newt. ed Yarr. Br. B.* i. p. 418 (1873); *Dresser, B. Eur.* pt. xliv. (1875); *Irby, B. Gibr.* p. 84 (1875); *Fallon, Ois. Belg.* p. 51 (1875); *Blanf. East. Pers.* ii. p. 174 (1876).

La Fauvette à tête noire, *Buff. Hist. Nat. Ois.* v. p. 125 (1778); *Daubent. Pl. Enl.* 580. figs. 1, 2 (1783).

Blackcap, *Lath. Gen. Syn.* ii. p. 415 (1783).

Curruca atricapilla (*Linn.*), *Koch, Syst. baier. Zool.* i. p. 155 (1816); *Boie, Isis*, 1822, p. 553; *Fleming, Brit. An.* p. 70 (1828); *Selby, Brit. Orn.* i. p. 209 (1833); *Gould, B. Eur.* ii. pl. 120 (1837); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Thomps. B. Irel.* i. p. 183 (1849); *Bp. Consp.* i. p. 294 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 240 (1859); *Filippi, Viagg. Pers.* p. 348 (1865); *Loche, Expl. Sci. Algér., Ois.* p. 233 (1867); *Sharpe, Cat. Afr. B.* p. 35 (1871); *Shelley, B. Egypt*, p. 105 (1872); *Gould, B. Gt. Br.* ii. pt. lx. (1873).

Monachus atricapilla (*Linn.*), *Kaup, Natürl. Syst.* p. 33 (1829).

Curruca heinekeni, *Jard. Edinb. Journ. Nat. & Geogr. Sc.* i. p. 243 (1830); *Bp. Consp.* i. p. 294 (1850).

Curruca nigricapilla, *Brehm, Vög. Deutschl.* p. 417 (1831, *nec Cab.*).

Curruca pileata, *Brehm, tom. cit.* p. 418 (1831).

Ficedula atricapilla (*Linn.*), *Blyth, Rennie's Field Nat.* i. p. 310 (1833).

Curruca rubricapilla, *Landbeck, Vög. Würtemb.* p. 44 (1834).

Philomela atricapilla (*Linn.*), *Swains. Classif. B.* ii. p. 240 (1837).

Epilais atricapilla (*Linn.*), *Cab. Mus. Hein.* i. p. 36 (1850).

Sylvia naumanni, *Von Müller, Naum.* 1851, pt. iv. p. 26.

Sylvia (Curruca) ruficapilla, *Naum. Vög. Deutschl.* xiii. p. 411 (1853).

Curruca ruficapilla (*Naum.*), *Brehm, Naum.* 1855, p. 283.

Sylvia heinekeni (*Jardine*), *Gray, Hand-l. B.* i. p. 213. no. 3018 (1869).

Sylvia ruficapilla (*Naum.*), *Gray, Hand-l. B.* i. p. 213. no 3020 (1869).

Sylvia (Curruca) atricapilla (*Linn.*), *Fritsch, Vög. Eur.* p. 171 (1870).

In the *adult male in spring plumage* the general colour of the upper parts is bluish grey, almost imperceptibly suffused with olive-brown; forehead and crown black; cheeks and nape bluish grey; wings and tail brown, narrowly margined on the outside webs with olive-brown. Underparts pale bluish grey, shading into white on the centre of the belly; axillaries and under wing-coverts white; inner margin of quills pale grey. Bill of typical shape, dark brown, the under mandible pale at the base; rictal bristles few and very slender. Wing with the fourth and fifth primaries nearly equal and longest; second primary a little longer than the sixth; bastard primary extending 0·15 inch beyond the primary-coverts. Tail shorter than the wing, outside feathers varying from 0·1 to 0·2 inch shorter than the longest. Legs, feet, and claws bluish grey. Length of wing 3·0 to 2·6 inches, tail 2·5 to 2·2, culmen 0·58 to 0·5, tarsus 0·85.

The *female* differs from the male in having the black on the head replaced by rusty brown. *After the autumn moult* the upper parts

are more suffused with buffish brown, and the underparts, cheeks, and nape are pale buffish brown. *Birds of the year* scarcely differ from adults in autumn plumage, except that the head of the male is intermediate in colour between that of the adult male and adult female.

The *male* in first plumage is said to resemble the female, and to attain the black head in the first autumn by a change in the colour of the feathers, and not by a moult. It is also asserted that this species has no spring moult; but these alleged facts require verification.

A curious local race (*Sylvia heinekeni*) is found on the island of Madeira, having the entire head, throat, and breast black. It is said to occur accidentally, one or two individuals in a brood only possessing this peculiarity. It is probably an instance of partial melanism and has no claim to be considered even a subspecies.

The Blackcap, or Black-capped Warbler, breeds throughout Europe to within two hundred miles of the Arctic Circle, and occasionally in North Africa, extending eastwards as far as Persia, where, however, it is very rare. Westwards it extends as far as the Azores. Some winter in South Europe and North Africa, others in Senegal.

a. ♂ ad. st.	England.	
b. ♂ ad. sk.	Devonshire.	Col. Montagu [P.].
c. ♀ ad. sk.	Wiltshire.	Col. Montagu [P.].
d, *e*. ♂ ♀ ad.; *f*, *g*. Pull. st.	Cambridgeshire.	Mr. J. Baker [C.].
h. ♂ ad. sk.	Cambridge, April 14 (*O. Salvin*).	F. Godman and O. Salvin, Esqrs. [P.].
i, *k*. ♂ ad. sk.	Avington, Hants, May 5.	Ed. Shelley, Esq. [P.].
l. ♀ ad. sk.	South Sweden, Sept. 12. (*Meves*).	R. B. Sharpe, Esq. [P.].
m. ♀ ad. sk.	Belgium, May 18.	Brussels Mus. [P.].
n. ♂ ad. sk.	Seville, Dec. 8.	Howard Saunders, Esq. [P.].
o. ♀ ad. sk.	Gibraltar.	Col. Irby [P.].
p, *q*. ♂ ♀ ad. sk.	Mount Taygetos, Greece.	C. W. L. Merlin, Esq. [P.].
r, *s*. ♂ ♀ ad. sk.	Palestine.	Canon Tristram [C.].
t, *u*, *v*. ♂ ad. sk.	St. Michaels, Azores, Mar. (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
w, *x*. Ad. sk.	St. Michaels, Azores, April (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
y. Ad. sk.	Madeira (var. *heinekeni*).	E. Wilson, Esq. [P.].
z, *a'*. ♂ ♀ ad. sk.	Teneriffe, April 7, 22 (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
b', *c'*. ♂, ♂ imm. sk.	Cape-Verd Isles (*Keulemans*).	R. B. Sharpe, Esq.
d'. ♂ ad. sk.	Gambia River.	R. B. Sharpe, Esq. [P.].
e'. ♀ ad. sk.	Gambia River.	J. H. Gurney, Esq. [P.].
f'. ♂ ad. sk.	Gambia River.	
g'. Skeleton.	England.	Purchased.
h', *i'*. Skulls, ♂ ♀.	Würtemberg.	Dr. A. Günther [C.].

14. Sylvia nana.

Curruca nana, *Hempr. et Ehr. Symb. Phys. Aves*, fol. cc (1833).
Salicaria aralensis, *Eversm. Bull. Soc. Nat. Mosc.* xxiii. pt. 2, p. 565, pl. viii. fig. 1 (1850); *Eversm. Journ. Orn.* 1853, p. 286.
Stoparola deserti, *Loche, Rev. et Mag. Zool.* 1858, p. 394, pl. xi. fig. 1; *Loche, Expl. Sci. Algér., Ois.* p. 245 (1867).
Sylvia delicatula, *Hartlaub, Ibis*, 1859, p. 340, pl. x. fig. 1; *Blyth, Ibis*, 1867, p. 28; *Salvad. Atti R. Accad. Sci. Torino*, iii. p. 291 (1868); *Hume, Ibis*, 1869, p. 355; *Gray, Hand-l. B.* i. p. 212. no. 3008 (1869); *Hume, Stray Feath.* i. p. 199 (1873).
Sylvia doriæ, *Filippi, Viagg. Pers.* p. 348 (1865).
Sylvia nana (*Hempr. et Ehr.*), *Gray, Hand-l. B.* i. p. 212. no. 3010 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 306 (1869); *Dresser, Ibis*, 1876, p. 80; *Blanf. East. Pers.* ii. p. 178 (1876).
Sylvia chrysophthalma, *Heugl. Orn. N.O.-Afr.* i. p. 306 (1869).
Atraphornis aralensis (*Eversm.*), *Severtz. Turkest. Jevotn.* pp. 65, 124 (1873).
Sylvia aralensis (*Eversm.*), *Prjev. Rowley's Orn. Misc.* ii. p. 170 (1877); *David et Oust. Ois. Chine*, p. 241 (1877).

In the *adult male in spring plumage* the general colour of the upper parts is buff, shading into bright giraffe-colour on the upper tail-coverts; the quills are buffish brown, with more or less distinct pale tips; the innermost secondaries are buff, shading to pale giraffe on the edges, and with a central streak of buffish brown along the shaft; the two central tail-feathers are bright giraffe, with a central streak of buffish brown along the shaft; the outside tail-feathers on each side white, second dark brown, broadly tipped and narrowly margined with white, remainder dark brown, margined with bright giraffe. Underparts buffish white, very slightly darker on the breast and flanks; a buffish-white patch on the edge of the wing, just below the carpal joint; axillaries and under wing-coverts buffish white; inner margin of quills pale buff. Bill of typical shape, brown above, pale below, slightly darker at the tip; rictal bristles few and slender. Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary intermediate in length between the fifth and sixth, or sixth and seventh; bastard primary occasionally equal in length to the primary-coverts, but generally extending beyond them from 0·1 to 0·15 inch. Tail shorter than the wing, outside feathers about 0·15 inch shorter than the longest. Legs, feet, and claws very pale brown. Length of wing 2·35 to 2·0 inches, tail 2·1 to 1·85, culmen 0·46 to 0·4, tarsus 0·71.

The *female* does not appear to differ from the male, nor is there any appreciable difference between *spring* and *autumn plumage*, nor is it known that *birds of the year* differ from adults.

The Desert-Warbler, as its name implies, is confined to dry and arid wastes in Algiers, the Sinaitic peninsula, and Southern Persia. It breeds in Turkestan, and winters in Baluchistan and Scinde.

a. ♂, *b*. ♀ ad. sk.	Kokand.	Dr. Severtzoff [C.].
c. ♂ ad. sk.	Baluchistan, Jan. 25.	W. T. Blanford, Esq. [C.].

d. ♂ ad. sk.	Sihwan district, Scinde, Jan. 1877.	W. T. Blanford, Esq. [P.].
e. ♀ ad. sk.	Umarkot, Scinde, Jan. 23, 1877.	W. T. Blanford, Esq. [P.].

15. Sylvia subalpina.

Sylvia subalpina, *Bonelli, fide Temm. Man. d'Orn.* i. p. 214 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 93 (1822); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Keys. u. Blas. Wirb. Eur.* p. 186 (1840); *Gray, Gen. B.* i. p. 174 (1848); *Bp. Consp.* i. p. 294 (1850); *Cab. Mus. Hein.* i. p. 35 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 246 (1859); *Linderm. Vög. Griechenl.* p. 99 (1860); *Dubois, Ois. Eur.* pl. 67 (1862); *Gray, Hand-l. B.* i. p. 212. no. 3006 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 304 (1869); *Fritsch, Vög. Eur.* p. 175 (1870); *Salvad. Faun. Ital. Uce.* p. 102 (1871); *Sharpe, Cat. Afr. B.* p. 35 (1871); *Shelley, B. Egypt*, p. 109 (1872); *Dresser, B. Eur.* pt. xliv. (1875); *Irby, B. Gibr.* p. 87 (1875); *Blanf. East. Pers.* ii. p. 180 (1876).
Sylvia leucopogon, *Meyer, Taschenb. Zus. u. Ber.* p. 91 (1822).
Curruca subalpina (*Temm.*), *Boie, Isis*, 1822, p. 553; *Degl. et Gerbe, Orn. Eur.* i. p. 482 (1867); *Doderl. Avif. Sicil.* p. 121 (1869).
Curruca leupogon, *Boie, Isis*, 1822, p. 553.
Alsæcus leucopogon (*Meyer*), *Kaup, Natürl. Syst.* p. 108 (1829).
Curruca leucopogon, *Gould, B. Eur.* pl. 124 (1837).
Sylvia passerina, *Temm. apud Crespon, Orn. Gard.* p. 137 (1840).
Curruca albistriata, *Brehm, Vogelf.* p. 229 (1855).
Sylvia albistriata, *Brehm, Naum.* 1855, p. 283.
Stoparola subalpina (*Temm.*), *Bp. Cat. Parzud.* p. 6 (1856); *Loche, Expl. Sci. Algér., Ois.* p. 243 (1867).
Dumeticola subalpina (*Temm.*), *Homeyer, Journ. Orn.* 1862, p. 279.

In the *adult male in spring plumage* the general colour of the upper parts is slate-grey; wings brown, with narrow pale edges to the coverts, and broader pale edges to the innermost secondaries; tail brown, with more or less white on three or four of the outside feathers on each side; chin, throat, and breast chestnut, shading into pale chestnut on the flanks, and into nearly white on the centre of the belly and under tail-coverts; a narrow white line extends from the base of the bill towards the shoulder, separating the chestnut of the underparts from the grey of the upper parts; axillaries pale vinous grey. Under wing-coverts pale grey, with darker centres: inner margin of quills pale grey, with a slight chestnut tint. Bill of typical shape, dark brown, the lower mandible pale at the base; rictal bristles few and slender. Wing with the third and fourth primaries nearly equal and longest; second primary usually intermediate in length between the fifth and sixth, occasionally between the fourth and fifth; bastard primary very small, sometimes equal to the primary-coverts, sometimes extending 0·05 inch beyond them. Tail shorter than the wing, the outside feathers 0·2 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·45 to 2·25 inches, tail 2·25 to 2·0, culmen 0·49 to 0·4, tarsus 0·75.

The *female* differs from the male in having the slate-grey of the

upper parts replaced by earthy brown, and the chestnut of the chin, throat, breast, and flanks by buffish white, with a slight vinous tinge on the sides of the breast. I have been unable to obtain dated skins in *autumn plumage*; but undated skins, in which the chestnut of the underparts of the male is replaced by pale vinous, may prove to be in this plumage. *Birds of the year* are buffish brown on the breast and flanks, the male resembling the female, except in being slightly greyer on the upper parts.

The basin of the Mediterranean may be said to be the breeding-range of the Subalpine Warbler, probably extending eastwards as far as Persia. In Europe it is certainly only a summer visitor; but in North Africa it appears to be a partial resident.

a. ♂ ad. sk.	Greece, July 9.	R. B. Sharpe, Esq.
b. ♂ ad. sk.	Sardinia, May 12 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
c. ♂ ad. sk.	Europe (*Verreaux*).	Purchased.
d. ♂ ad. st.	Europe.	
e. ♂ ad. st.	Italy.	Purchased.
f. ♂ ad. st.	Italy.	E. Wilson, Esq. [P.].
g. ♀ ad. st.	Italy.	Baron Laugier.
h. ♂ ad. sk.	North Italy, April 9 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
i. ♂ ad. sk.	Tangier.	Mons. Favier [C.].
k, *l*. Ad. sk.	Tangier (*Olcese*).	Col. Irby [P.].
m. Ad. sk.	Casa Vieja.	Col. Irby [P.].
n. ♂ ad. sk.	R. Gambia.	R. B. Sharpe, Esq.

16. Sylvia melanothorax.

Sylvia melanothorax, *Tristram, Ibis*, 1872, p. 296; *Dresser, B. Eur.* pt. xxxix. (1875).

In the *adult male in spring plumage* the general colour of the upper parts is slate grey, shading into black on the nape, head, and ear-coverts; quills, wing-coverts, and innermost secondaries nearly black, all except the longest primaries narrowly edged with white on the external webs; tail-feathers nearly black, the whole of the external web and the terminal half of the internal web of the outside feather on each side white, and more or less white at the tips of the next two feathers on each side. The underparts are mottled black and white, each feather being white, with a nearly black centre; the flanks are nearly uniform slate-grey; edge of the wing white; axillaries slate-grey; under wing-coverts mottled black and white; inner margin of quills pale brown. Bill of typical shape, nearly black, the under mandible pale at the base; rictal bristles nearly obsolete. Wing with the third and fourth primaries nearly equal and longest; second primary intermediate in length between the fifth and sixth; bastard primary extending about 0·1 inch beyond the primary-coverts. Tail shorter than the wing; outside feathers 0·3 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·35 to 2·25 inches, tail 2·25 to 2·15, culmen 0·52 to 0·47, tarsus 0·75.

The *female* scarcely differs from the male. *After the autumn moult* the white margins to the feathers of the underparts are longer, concealing more of the black centres. *Birds of the year* have

J.G Keulemans del. Mintern Bros. imp

Sylvia blanfordi.

the upper parts brown, and the feathers of the chin, throat, and breast white, with concealed black bases; the rest of the underparts are pale brown.

The Palestine Warbler appears to be confined to Cyprus and Palestine. It is not known that it is a migratory bird.

a. ♂ ad. sk. Cyprus, May 1. Lord Lilford [P.].

17. Sylvia blanfordi. (Plate II.)

Sylvia melanocephala (*Gmel.*), *apud Blanford, Geol. & Zool. Abyss.* p. 379 (1870).
Sylvia blanfordi, *Seebohm, P. Z. S.* 1878, p. 979.

In the *adult male in spring plumage* the general colour of the upper parts is dark grey, more or less suffused with brown; head, nape, and ear-coverts brownish black; innermost secondaries brown, with pale edges; quills brown; tail very dark brown, approaching black, outside feathers probably tipped with white. Underparts nearly white, slightly suffused with brown on the sides of the breast, flanks, axillaries, and under tail-coverts; axillaries and under wing-coverts greyish white, the latter with darker centres; inner margin of quills pale brown. Bill of typical shape, dark brown, the under mandible slightly paler at the base; rictal bristles long, but few and very slender. Wing with the third, fourth, and fifth primaries nearly equal; second primary about equal to the eighth or ninth; bastard primary somewhat longer than usual, extending 0·3 inch beyond the primary-coverts. Tail slightly longer than the wing, outside feathers 0·3 inch shorter than the longest. Legs, feet, and claws dark bluish grey. Length of wing 2·55 inches, tail 2·56, culmen 0·5, tarsus 0·85.

The *female* of this bird is unknown, as is also the plumage of the *birds of the year*, or of both sexes *after the autumn moult*.

Blanford's Warbler has hitherto only been known from a single example obtained in Abyssinia. Nothing is known of its migrations.

a. ♂ ad. sk. Rairo, Abyssinia, Aug. W. T. Blanford, Esq. [C.].

18. Sylvia melanocephala.

Motacilla melanocephala, *Gmel. Syst. Nat.* i. p. 970 (1788).
Sylvia melanocephala (*Gmel.*), *Lath. Ind. Orn.* ii. p. 509 (1790); *Temm. Man. d'Orn.* i. p. 203 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 90 (1822); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Crespon, Orn. Gard.* p. 129 (1840); *Keys. u. Blas. Wirb. Eur.* p. 187 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 150 (1840); *Werner, Atlas, Insectiv.* pl. 40 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Linderm. Vög. Griechenl.* p. 100 (1860); *Dubois, Ois. Eur.* pl. 65 (1862); *Gray, Hand-l. B.* i. p. 212. no. 3001 (1869); *Dresser, B. Eur.* pt. xxxiii. (1874); *Irby, B. Gibr.* p. 85 (1875).
Sylvia ruscicola, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 186 (1817); *id. Faune Franç.* i. p. 203 (1820); *Roux, Orn. Prov.* p. 329 (1825).

Curruca melanocephala (*Gmel.*), *Boie, Isis*, 1822, p. 553; *Gould, B. Eur.* ii. pl. 123 (1837); *Degl. et Gerbe, Orn. Eur.* i. p. 487 (1867); *Doderl. Avif. Sicil.* p. 122 (1869); *Sharpe, Cat. Afr. B.* p. 35 (1871); *Shelley, B. Egypt*, p. 107 (1872).

Pyrophthalma melanocephala (*Gmel.*), *Bp. Ucc. Eur.* p. 37 (1842); *id. Consp.* p. 293 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 248 (1859); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Loche, Expl. Sci. Algér., Ois.* p. 246 (1867); *Salvad. Faun. Ital. Ucc.* p. 105 (1871).

Sylvia ochrogenion, *Lindermeyer, Isis*, 1843, p. 344.

Melizophilus melanocephalus (*Gmel.*), *Cab. Mus. Hein.* i. p. 35 (1850).

Curruca luctuosa, *Brehm, Vogelf.* p. 229 (1855).

Curruca leucopogon (*Meyer*), *apud Brehm, Vogelf.* p. 229 (1855).

Pyrophthalma nigricapilla (*Cabanis*), *apud Brehm, Naum.* 1855, p. 283.

Pyrophthalma luctuosa, *Brehm, Naum.* 1855, p. 283.

Motacilla leucogastra, *Ledru, fide Bolle, Journ. Orn.* 1857, p. 282.

Dumeticola melanocephala (*Gmel.*), *Homeyer, Journ. Orn.* 1862, p. 277.

Sylvia (Pyrophthalma) melanocephala (*Gmel.*), *Fritsch, Vög. Eur.* p. 172 (1870).

In the *adult male in spring plumage* the general colour of the upper parts is slate-grey, shading into black on the nape, head, and ear-coverts; occasionally the upper tail-coverts have darker centres; innermost secondaries dark brown, broadly edged externally with pale grey; wing-coverts dark brown, narrowly edged with pale grey; quills dark brown, tipped with pale grey; tail dark grey, approaching black, the outer web of the outside tail-feather white, the inner web broadly tipped with white; several of the succeeding tail-feathers with a more or less developed terminal wedge of white. Underparts greyish white, fading into pure white on the chin, upper throat, and centre of belly; edge of the wing white; axillaries and under wing-coverts bluish grey; inner margin of quills pale brown. Bill of typical shape, dark brown, the under mandible pale at the base; rictal bristles nearly obsolete. Wing with the third, fourth, and fifth primaries nearly equal; second primary intermediate in length between the sixth and seventh, or seventh and eighth; bastard primary extending from 0·05 to 0·15 inch beyond the primary-coverts. Tail longer than the wing; outside feathers 0·3 to 0·4 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·35 to 2·1 inches, tail 2·55 to 2·25, culmen 0·53 to 0·49, tarsus 0·8.

The *female* differs from the male in having the upper parts slaty brown, shading into slate-grey on the crown and ear-coverts; the breast, flanks, and under tail-coverts are more or less suffused with isabelline brown. *After the autumn moult* the head of the male becomes a browner, duller black. *Birds of the year* scarcely differ from adult females.

The Sardinian Warbler inhabits the basin of the Mediterranean. On the European side it is a partial resident, but on the African side it appears to be principally a winter visitor.

a. ♂ ad. sk.	Europe (*Verreaux*).	Purchased.
b, *c*. ♂ ad. sk.	Gibraltar.	Col. Irby [P.].
d, *e*. ♂ ♀ ad. st.	Italy.	Purchased.
f. ♂ ad. st.	Italy.	Baron Laugier.
g. ♂, *h*. ♀ ad. sk.	Sardinia, May 11, 19 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
i. ♂ ad. sk.	Asia Minor.	T. Robson, Esq. [C.].
k. ♂ ad. sk.	Smyrna, Nov. 28, 1874 (*C. G. Danford*).	H. Seebohm, Esq. [P.].
l. ♂, *m*. ♀ ad. sk.	Palestine.	Canon Tristram [C.].
n. ♂ ad. sk.	Jericho, Jan. 4 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
o. ♂ ad. sk.	Tunis, March 29 (*O. Salvin*).	F. Godman and O. Salvin, Esqrs. [P.].

19. Sylvia provincialis.

Sylvia provincialis (*Gmel.*)*.
Le Pitchou, *Buff. Hist. Nat. Ois.* v. p. 158 (1778).
Le Pitte-chou de Provence, *Daubent. Pl. Enl.* 655. fig. 1 (1783).
Motacilla undata, *Bodd. Table Pl. Enl.* p. 40 (1783).
Dartford Warbler, *Lath. Gen. Syn.* ii. p. 435 (1783); *Lewin, B. Gt. Br.* iv. pl. 108 (1797).
Sylvia dartfordiensis, *Lath. Gen. Syn. Suppl.* i. p. 287 (1787); *id. Ind. Orn.* ii. p. 517 (1790).
Motacilla provincialis, *Gmel. Syst. Nat.* i. p. 958 (1788).
Melizophilus dartfordiensis (*Lath.*), *Leach, Syst. Cat. Mamm. &c. Brit. Mus.* p. 25 (1816).
Sylvia ferruginea, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 209 (1817); *id. Faune Franç.* i. p. 218 (1820); *Roux, Orn. Prov.* p. 337 (1825).
Sylvia provincialis (*Gmel.*), *Temm. Man. d'Orn.* i. p. 211 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 93 (1822); *Crespon, Orn. Gard.* p. 136 (1840); *Keys. u. Blas. Wirb. Eur.* p. 186 (1840); *Werner, Atlas, Insectiv.* pl. 46 (1842); *Linderm. Vög. Griechenl.* p. 100 (1860); *Dubois, Ois. Eur.* pl. 70 (1862); *Heugl. Orn. N.O.-Afr.* i. p. 302 (1869).
Curruca provincialis (*Gmel.*), *Boie, Isis*, 1822, p. 553; *Fleming, Brit. An.* p. 70 (1828).
Thamnodus provincialis (*Gmel.*), *Kaup, Natürl. Syst.* p. 109 (1829).
Melizophilus provincialis (*Gmel.*), *Selby, Brit. Orn.* i. p. 219 (1833); *Jenyns, Man. Brit. Vertebr.* p. 112 (1835); *Gould, B. Eur.* ii. pl. 129 (1837); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *id. Consp.* i. p. 293 (1850); *Cab. Mus. Hein.* i. p. 35 (1850); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Gould, B. Gt. Br.* ii. pl. 59 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 490 (1867); *Loche, Expl. Sci. Algér., Ois.* p. 249 (1867); *Doderl. Avif. Sicil.* p. 123 (1869); *Salvad. Faun. Ital. Ucc.* p. 104 (1871); *Shelley, B. Egypt*, p. 108 (1872).
Ficedula ulicicola, *Blyth, Rennie's Field Nat.* i. p. 310 (1833).
Malurus provincialis (*Gmel.*), *Selby, Cat. Gen. B.* p. 10 (1840).
Sylvia undata (*Bodd.*), *Gray, Gen. B.* i. p. 174 (1848); *id. Hand-l. B.* i. p. 212. no. 3003 (1869); *Harting, Handb. Br. B.* p. 16 (1872).

* Boddaert's name is accompanied by no description, but is published as the Latin name of "le Pitte-chou de Provence," figured by Daubenton in the 'Planches Enluminées.' The figure is sufficiently good to leave no reasonable doubt as to the species intended to be designated; and Boddaert's name may therefore be held to have been "clearly defined;" nevertheless there seems to be no sufficient reason why the name in common use should be changed.

Melizophilus obsoletus, *Brehm, Naum.* 1855, p. 283.
Pyrophthalma provincialis (*Gmel.*), *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 249 (1859).
Sylvia (Melizophilus) provincialis (*Gmel.*), *Fritsch, Vög. Eur.* p. 176 (1870).
Melizophilus undatus (*Bodd.*), *Newt. ed. Yarr. Br. B.* i. p. 398 (1873); *Dresser, B. Eur.* pt. xliii. (1875); *Irby, B. Gibr.* p. 88 (1875).

In the *adult male in spring plumage* the general colour of the upper parts is very dark sooty brown, shading into very dark slate-grey on the head; innermost secondaries, wing-coverts, and quills dark brown, edged externally with pale brown; tail very dark grey, the outside web and tip of the outside feathers white. Underparts chestnut-brown, shading into white on the centre of the belly, and having the feathers of the chin and upper throat tipped with white; a white patch on the edge of the wing just below the carpal joint; under tail-coverts grey, with whitish tips; axillaries and under wing-coverts grey; inner margin of quills pale reddish brown. Bill of typical shape, very dark brown, the lower mandible pale at the base; rictal bristles short and slender. Wing with the fourth and fifth primaries slightly the longest; second primary equal to the ninth or tenth; bastard primary extending 0·2 inch beyond the primary-coverts. Tail considerably longer than the wing; outside feathers 0·4 to 0·6 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·15 to 1·9 inches, tail 2·7 to 2·3, culmen 0·5 to 0·42, tarsus 0·75.

The *female* differs from the male in having the general colour of the underparts pale cinnamon-brown instead of rich chestnut-brown. *After the autumn moult* but little change in the plumage apparently takes place. *Birds of the year* are slightly paler and browner above, and have the underparts considerably paler than in the adult female.

The Dartford Warbler is a resident in the south of England, some parts of France, the Spanish peninsula, and Italy, occasionally straying into Greece; it is also found in North Africa and Palestine, apparently wintering in the plains, and retiring to the hills to breed.

a, b. ♂, *c.* Juv. sk.	Farnham, Surrey (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
d, e. Ad. st.	Kent.	Col. Montagu [P.].
f. Ad. st.	Devonshire.	Col. Montagu [P.].
g, h. Ad. sk.	Gibraltar.	Col. Irby [P.].
i. ♂ ad. sk.	Sardinia, May 20 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
k. Ad. sk.	Morocco (*Olcese*).	R. B. Sharpe, Esq. [P.].

20. Sylvia deserticola. (Plate III.)

Sylvia deserticola, *Tristram, Ibis*, 1859, p. 58; *Gray, Hand-l. B.* i. p. 212. no. 3009 (1869).
Stoparola deserti, *Loche, apud Sclater, Ibis*, 1859, p. 417.

This species is only known in *autumn* or winter plumage, the

J Smit del. Mintern Bros. imp.

Sylvia deserticola.

types having been obtained from the 29th of November to the 23rd of December. In the *male* the head, nape, rump, and upper tail-coverts are brown, more or less suffused with chestnut, which is the predominant colour on the back; the wings are brown, narrowly edged on the outside webs with pale chestnut; wing-coverts and innermost secondaries broadly edged with bright chestnut; tail-feathers brown, narrowly edged with pale chestnut, the two centre feathers the same colour as the others; the entire outside web and a large part of the inside web of the outermost feather on each side white, and small wedges of white at the tips of the two next outer tail-feathers on each side. The whole of the underparts, including the axillaries and inner margin of quills, pale chestnut, shading into bright chestnut on the sides of the breast and flanks. Bill of typical shape, dark brown, the under mandible pale at the base; rictal bristles few and slender. Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary intermediate in length between the seventh and eighth; bastard primary extending about 0·1 inch beyond the primary-coverts. Tail somewhat longer than the wing, the outside feathers varying from 0·2 to 0·25 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·15 to 2·1 inches, tail 2·31 to 2·2, culmen 0·46 to 0·4, tarsus 0·75.

The *female* differs from the male in having less chestnut on the upper parts, especially on the head, which is nearly uniform greyish brown.

Tristram's Warbler has only been found in the deserts south of Algiers.

a. ♂ ad. sk. Oued Soudan, Algerian Sahara, Nov. 29, 1856. Canon Tristram [P.].

21. Sylvia sarda.

Sylvia sarda, *Temm.* *

Moschita o Noschita, *Cetti, Ucc. di Sard.* p. 218 (1776).

Sylvia moschita, *Gmel. Syst. Nat.* i. p. 970 (1788).

Sylvia sarda, *Marm. fide Temm. Man. d'Orn.* i. p. 204 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 91 (1822); *Bp. Comp. List B. Eur. & N. Amer.* p. 14 (1838); *Keys. u. Blas. Wirb. Eur.* p. 186 (1840); *Werner, Atlas, Insectiv.* pl. 41 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Linderm. Vög. Griechenl.* p. 100 (1860); *Heugl. Orn. N.O.-Afr.* i. p. 303 (1869); *Gray, Hand-l. B.* i. p. 212. no. 3004 (1869).

Sylvia sardonia, *Vieill. Faune Franç.* i. p. 203 (1820).

Sylvia sardaniæ, *Vieill. Tabl. Enc. Orn.* ii. p. 465 (1823).

Curruca sarda (*Marm.*), *Boie, Isis*, 1822, p. 553; *Gould, B. Eur.* ii. pl. 127 (1837).

Pyrophthalma sarda (*Marm.*), *Bp. Ucc. Eur.* p. 37 (1842); *id. Consp.* p. 293 (1850); *Loche, Expl. Sci. Algér., Ois.* p. 247 (1867).

* There can scarcely be a doubt that Gmelin's name has the priority of that of Temminck; but, since this bird has been in undisturbed possession of the latter for upwards of half a century, we may fairly ignore the former, on the ground that Gmelin's description does not "clearly define" the species. Gmelin's name does not deserve to stand, inasmuch as he obviously never saw the bird, or he would scarcely have copied Cetti's error in ascribing the rufous tint to the head instead of to the flanks.

Melizophilus sardus (*Marm.*), *Gerbe, Dict. Univ. d'Hist. Nat.* xii. p. 113 (1848); *Cab. Mus. Hein.* i. p. 35 (1850); *Newt.** *List B. Eur. Blasius*, p. 11 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 492 (1867); *Doderl. Avif. Sicil.* p. 123 (1869); *Salvad. Faun. Ital. Ucc.* p. 104 (1871); *Shelley, B. Egypt*, p. 108 (1872); *Dresser, B. Eur.* pt. xliv. (1875).

Dumeticola sarda (*Marm.*), *Homeyer, Journ. Orn.* 1862, p. 279.

Sylvia (Pyrophthalma) sarda (*Marm.*), *Fritsch, Vög. Eur.* p. 173 (1870).

In the *adult male in spring plumage* the general colour of the upper parts is very dark grey, approaching dull black on the head; innermost secondaries, wing-coverts, and quills dark brown, edged externally with pale grey; tail dark grey, the outside feathers narrowly fringed with white on the outside web and the others with pale grey. Underparts dark grey, shading into nearly white on the centre of the belly and chin, with a slight vinous tinge on the flanks and thighs; a white patch on the edge of the wing just below the carpal joint; under tail-coverts dark grey with nearly white margins; axillaries and under wing-coverts dark grey; inner margin of quills pale brown. Bill of typical shape, dark brown, the lower mandible pale at the base; rictal bristles moderately developed. Wing with the third, fourth, and fifth primaries nearly equal in length; second primary generally intermediate in length between the seventh and eighth, occasionally between the sixth and seventh; bastard primary extending 0·15 inch beyond the primary-coverts. Tail longer than the wing, considerably rounded; outside feathers 0·3 to 0·4 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·25 to 2 inches, tail 2·45 to 2·2, culmen 0·46 to 0·41, tarsus 0·8.

The *female* differs from the male in being browner both above and below. *After the autumn moult* the plumage of both sexes is browner, the female being slightly paler than the male; and the *birds of the year* somewhat paler still, especially on the underparts.

Marmora's Warbler does not appear to be a migratory bird. It is found in Portugal, the Balearic Isles, Corsica, Sardinia, and Sicily. It is said also to have occurred in Algiers, Greece, and Palestine.

a. ♂ ad. sk.	Sardinia, April 10 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
b. ♀, *c*. Juv. sk.	Sardinia, May 19 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].

22. Sylvia galactodes.

Sylvia galactodes, *Temm.*

Reed-Thrush, var. A, *Lath. Gen. Syn.* ii. p. 33 (1783).

Turdus arundinaceus, *Linn.*, var. β, *Lath. Ind. Orn.* i. p. 334 (1790).

Sylvia galactodes†, *Temm. Man. d'Orn.* i. p. 182 (1820).

Turdus rubiginosus, *Meyer, Taschenb. Zus. u. Ber.* p. 66 (1822).

Aedon galactodes (*Temm.*), *Boie, Isis*, 1826, p. 972; *Gray, Gen. B.* i. p. 173 (1848); *Bp. Consp.* i. p. 286 (1850); *Heugl. Syst. Uebers.* p. 25 (1856); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Degl. et*

* Spelt *sarda*.

† Spelt *galactotes*.

Gerbe, Orn. Eur. i. p. 495 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 279 (1867); *Gould, B. Gt. Br.* ii. pl. 53 (1868); *Heugl. Orn. N.O.-Afr.* i. p. 276 (1869); *Fritsch, Vög. Eur.* p. 153 (1870); *Harting, Handb. Br. B.* p. 105 (1872); *Shelley, B. Egypt*, p. 85 (1872); *Newt. ed. Yarr. Br. B.* i. p. 355 (1873); *Dresser, B. Eur.* pt. xxxii. (1874); *Irby, B. Gibr.* p. 92 (1875).

Sylvia rubiginosa, *Temm. Man. d'Orn.* iii. p. 129 (1835).

Agrobates galactodes* (*Temm.*), *Swains. Classif. B.* ii. p. 241 (1837)

Salicaria galactodes* (*Temm.*), *Gould, B. Eur.* ii. pl. 112 (1837); *Keys. u. Blas. Wirb. Eur.* pp. lv, 183 (1840).

Erythropygia galactodes (*Temm.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 13 (1838).

Aedon rubiginosa (*Temm.*), *Degl. Orn. Eur.* i. p. 567 (1849).

Aedon minor, *Cab. Mus. Hein.* i. p. 39 (1850).

Calamoherpe galactodes (*Temm.*), *Schl. Vog. Nederl.* p. 141 (1854).

Aedon pallens brachyrhynchos,
Aedon pallens macrorhynchos,
Aedon galactodes brachyrhynchos,
Aedon galactodes macrorhynchos,
Aedon meridionalis brachyrhynchos,
Aedon meridionalis macrorhynchos,
Brehm, Journ. Orn. 1856, pp. 441, 442.

Agrobates rubiginosus (*Temm.*), *Dubois, Ois. Eur.* pl. 74 (1862).

In the *adult male in spring plumage* the general colour of the upper parts is a palish chestnut-brown or giraffe-colour; lores and the feathers behind the eye brown; eye-stripe buffish white, extending to the nape; quills and wing-coverts brown, the outside webs margined with buffish white; tail rich chestnut-brown, the two centre feathers with a more or less obscure broad terminal dark band, sometimes obsolete, the remaining feathers with broad terminal white bands and nearly black subterminal bands. The whole of the underparts very pale buffish white, slightly darker on the sides of the breast and flanks; inner margin of quills buff. Bill with the upper mandible brown and the under mandible horn-colour; rictal bristles very small. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 0·7 to 0·5. Tail shorter than the wing, considerably rounded, the outside feathers 0·2 to 0·25 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 3·5 to 3·0 inches, tail 2·9 to 2·5, culmen 0·8 to 0·7, tarsus 1·1 to 1·0.

The differences in the colour of the plumage caused by age, sex, and season are very small. Examples from Abyssinia are on an average smaller than those from other localities, and might almost be allowed subgeneric rank, in which case they will stand as *Sylvia minor* (Cab.).

The Rufous Warbler breeds in Spain and Portugal, and throughout North Africa as far south as Abyssinia, in the latter country being a resident. It is said also to winter on the Gold Coast.

a. Ad. st.	Start Point, Devonshire.	W. D. Llewellyn, Esq. [P.].
b. Ad. sk.	Tangier (*Olcese*).	Col. Irby [P.].
c. Ad. st.	Tunis.	L. Fraser, Esq. [C.].

* Spelt *galactotes*.

d. Juv.; *e*, *f.* Ad. sk.	Tunis.	L. Fraser, Esq. [C.].
g, *h.* ♀ ad. sk.	Chemora, Prov. of Constantine, Algeria, May 19, 1857 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
i, *k.* Ad. sk.	Egypt.	Sir J. Bowring [P.].
l. Ad. st.	Egypt.	Sir J. Bowring [P.].
m. ♀ ad. sk.	Koomaylee, Abyssinia, Feb. 13, 1868.	W. T. Blanford, Esq. [P.].
n. ♂ ad. sk.	Undul Wells, May 30, 1868.	W. T. Blanford, Esq. [P.].
o. ♀ ad. sk.	Ain, Lebka valley, Aug. 16, 1868.	W. T. Blanford, Esq. [P.].
p. Ad. sk.	Gabsa (*Esler*).	R. B. Sharpe, Esq.
q. Ad. sk.	Kordofan.	Purchased.
r. ♀ ad. sk.	Mount Tabor, Palestine.	Canon Tristram [C.].
s. ♂ ad. sk.	Wady el Beereh, Palestine.	Canon Tristram [C.].
t. ♀ ad. sk.	Gennesaret, May 24, 1864 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
u. ♂ ad. sk.	Jericho, April 13, 1864 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].

23. Sylvia familiaris.

Curruca galactodes, var. syriaca, *Hempr. & Ehr. Symb. Phys., Aves*, fol. bb (1833).
Sylvia familiaris, *Ménétr. Cat. Rais. Cauc.* p. 32 (1832).
Erythropygia familiaris (*Ménétr.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838).
Salicaria familiaris (*Ménétr.*), *Schl. Rev. Crit.* pp. xxix, 58 (1844).
Salicaria galactodes (*Temm.*), *apud Von der Mühle, Orn. Griechenl.* p. 66 (1844).
Aedon familiaris (*Ménétr.*), *Gray, Gen. B.* i. p. 173 (1848); *Bp. Consp.* i. p. 286 (1850); *Gray, Hand-l. B.* i. p. 211. no 2980 (1869); *Dresser, B. Eur.* pt. xxxii. (1874); *id. Ibis*, 1876, p. 80; *Bogd. B. Cauc.* p. 100 (1879).
Aedon rubiginosus (*Meyer*), *apud Degl. Orn. Eur.* i. p. 567 (1849, *partim*).
Calamoherpe familiaris (*Ménétr.*), *Schl. Vog. Nederl.* p. 141 (1854).
Aedon bruchii, *Brehm, Journ. Orn.* 1856, p. 442.
Aedon brachyrhynchos, *Brehm, Journ. Orn.* 1856, p. 442.
Aedon macrorhynchos, *Brehm, Journ. Orn.* 1856, p. 442.
Agrobates familiaris (*Ménétr.*), *Dubois, Ois. Eur.* pl. 74*a* (1862).
Aedon galactodes (*Temm.*), *β.* familiaris (*Ménétr.*), *Newton, List B. Eur. Blasius*, p. 11 (1862).
Aedon galactodes (*Temm.*), *apud Filippi, Viagg. Pers.* p. 348 (1865), *apud Degl. et Gerbe, Orn. Eur.* i. p. 495 (1867, *partim*), *apud Hume, Ibis*, 1869, p. 355, *apud Doderl. Avif. Sicil.* p. 129 (1869), *apud Salvad. Faun. Ital. Ucc.* p. 118 (1871).
Aedon galactodes (*Temm.*), var. familiaris (*Ménétr.*), *Severtz. Turkest. Jevotn.* p. 65 (1873).

This species differs from the preceding in having the two centre tail-feathers greyish brown instead of rich chestnut-brown; the rest of the tail-feathers and the rump and upper tail-coverts are the same in both species, but in the rest of the upper parts the palish chestnut-brown of the preceding species is replaced by greyish

brown; the very pale buffish white of the underparts is replaced in the present species by very pale greyish white; inner margins of quills pale buffish brown. Bill with the upper mandible brown and the under mandible horn-colour; rictal bristles very small. Wings with the third and fourth primaries nearly equal and longest; second primary about equal to the fifth; bastard primary 0·65 to 0·8. Legs, feet, and claws pale brown. Length of wing 3·5 to 3·35 inches, tail 2·65 to 2·6, culmen 0·75 to 0·7, tarsus 1·05 to 1·0.

There are no differences in colour worthy of note attributable to age, sex, or season.

The Grey-backed Warbler breeds in Italy, Greece, Asia Minor, Palestine, the Caucasus, Persia, and Turkestan. It winters in Scinde and Rajpootana.

a. Ad. sk.	Athen	M. Parzudaki.
b. Ad. sk.	South Russia.	M. Verreaux.
c. Ad. sk.	Persia.	
d. ♂ ad. sk.	Near Regan, S.E. Persia, April 19, 1872.	W. T. Blanford, Esq. [C.].
e. ♀ ad. sk.	Bampur, Baluchistan, April 5, 1872.	W. T. Blanford, Esq. [C.].

2. PHYLLOSCOPUS.

	Type.
Ficedula, *Koch, Syst. baier. Zool.* i. p. 158 (1816, *nec Cuvier* 1799, *certè nec* Motacilla ficedula, *Linn.*) . .	P. sibilatrix ?
Trochilus, *Forster, Synopt. Cat.* p. 15 (1817, *nec Linn.* 1766)	P. sibilatrix ?
Asilus, *Bechst. Orn. Taschenb.* p. 173 (1802, *ex Möhring*, 1752, *preoccupied in Entomology*)	P. sibilatrix ?
Phylloscopus, *Boie, Isis*, 1826, p. 972	P. trochilus.
Sibillatrix, *Kaup, Natürl. Syst.* p. 98 (1829)	P. sibilatrix.
Phyllopneuste, *Meyer, fide Brehm, Vög. Deutschl.* p. 423 (1831)	P. sibilatrix.
Sylvicola, *Eyton, Cat. Brit. B.* p. 13 (1836, *nec Swainson*)	P. sibilatrix.
Reguloides, *Blyth, J. A. S. Beng.* xvi. p. 442 (1847).	P. superciliosus.
Acanthopneuste, *Blasius, Naum.* 1858, p. 313	P. borealis.
Phyllopseuste, *Meyer, fide Meves, Journ. Orn.* 1875, p. 429	P. sibilatrix.

Bill of *Phylloscopus trochilus*, Linn.

The genus *Phylloscopus* comprises a small group of birds familiarly known as Willow-Warblers. Some of the species approach the genus *Cryptolopha* so closely as scarcely to be generically

distinct. The Willow-Warblers are essentially fly-catchers in their habits, and may constantly be seen catching flies upon the wing. Their bills, if not very wide, are considerably depressed at the base, and the rictal bristles are well developed. Most of the species are migratory; the wing is long, flat, and pointed, whilst the bastard primary is very small; and the range of migration extends over thousands of miles. The migrations of others is confined to the plains within sight of the mountains where they breed. In these the wing is shorter, more concaved to fit the body, and rounded, whilst the bastard primary is larger, the vital energy required for its production not having been absorbed in lengthening the adjoining primaries. The tail is generally nearly even and frequently forked. All the species of the genus are quietly coloured, the upper parts varying from yellowish green to buffish brown, and the underparts from yellow to buff or white. The axillaries and under wing-coverts are yellow, a character which will serve to separate all the species of the genus from the nearly allied genera. Most of the species whose nidification is known build a semi-domed nest on or near the ground, and lay white eggs spotted with red.

In their breeding-range these birds are Palæarctic, ranging from the Atlantic to the Pacific, one species being known even to cross Behring's Straits into Alaska. Several species extend their range further north than the limit of forest-growth. Those species which do not breed within the Palæarctic Region ascend the Himalayas until they reach an elevation where they can enjoy a Palæarctic climate. The southern winter range of the genus extends in Africa to the Cape of Good Hope, and in Asia to Ceylon and the islands of the Malay archipelago, but no species has as yet been found in Australia.

Key to the Species.

A. Bill broad at the base and rather flat, with well-developed rictal bristles, almost Muscicapine; upper mandible dark, under mandible paler. *In unabraded plumage* the greater wing-coverts have pale tips, forming a conspicuous bar across the wing; the median wing-coverts have also more or less distinct pale tips, forming an obscure upper wing-bar. (Subgeneric group ACANTHOPNEUSTÆ.)

a. No mesial line on the crown.

a'. Second primary as long as or longer than the sixth.

a''. Exposed portion of bastard primary 0·3 to 0·35 inch in adults, 0·4 to 0·45 in birds of the year. Throat and belly in spring plumage nearly white. Length of wing 2·7 to 2·4 inches .... *borealis*, p. 40.

b''. Exposed portion of bastard primary 0·5 to 0·6 inch. The whole of the underparts in all plumages greenish yellow. Length of wing 2·85 to 2·6 inches.... *xanthodryas*, p. 42.

b'. Second primary shorter than the sixth.
" . Second primary longer than the eighth.
a'''. Upper parts yellowish green; underparts primrose-yellow; legs brown *nitidus*, p. 43.
b'''. Upper parts olive; underparts pale greyish yellow. Length of wing 2·5 to 2·1 inches. Legs plumbeous.
*a*⁴. Greater and median wing-coverts with pale tips ..... *plumbeitarsus*, p. 45.
*b*⁴. Greater wing-coverts only with pale tips ..... *viridanus*, p. 44.
c'''. Upper parts olive-brown, shading into russet on the rump; underparts pale greyish buff, shading into white on the throat and belly. Legs pale flesh-colour ..... *tenellipes*, p. 46.
d'''. Upper parts dark olive-green; underparts pale greyish yellow. Length of wing 2·83 to 2·4 inches. Legs plumbeous ..... *magnirostris*, p. 47.
c'. Second primary equal to the ninth or tenth *lugubris*, p. 48.
b. A pale mesial line on the crown.
d'. Second primary longer than the seventh; under tail-coverts pale yellow, in marked contrast to the nearly pure white of the belly ..... *coronatus*, p. 49.
e'. Second primary shorter than the seventh; underparts nearly uniform yellowish white.
d''. Length of wing 2·65 to 2·3 inches. Second primary intermediate in length between the seventh and eighth .... *occipitalis*, p. 50.
e''. Length of wing 2·4 to 2·1 inches. Second primary intermediate in length between the eighth and twelfth .... *reguloides*, p. 51.
f'. Length of wing 2·15 to 1·85 inch. Second primary intermediate in length between the ninth and twelfth; inner web of two outside tail-feathers on each side entirely white ..... *viridipennis*, p. 53.

B. Bill narrower at the base, flattened, slender, with moderately developed rictal bristles. Both mandibles usually dark, but the under mandible in rare instances pale. No bar across the wings. (Subgeneric group PHYLLOSCOPI.)
c. Bastard primary shorter than the primary-coverts, measuring from 0·3 to 0·4 inch. Second primary always longer than the fifth ..... *sibilatrix*, p. 54.
d. Second primary intermediate in length between the fifth and sixth (in very rare instances shorter than the sixth). Tail $\frac{7}{10}$ the length of the wing. Legs brown ..... *trochilus*, p. 56.
e. Second primary intermediate in length between the fifth and seventh. Head and upper back buffish brown, in strong contrast to the yellow rump ..... *bonelli*, p. 59.

f. Second primary intermediate in length between the sixth and ninth. Tail $\frac{2}{10}$ the length of the wing. Legs nearly black .. *rufus*, p. 60.
g. Wings and tail as last. Legs black. No yellow on underparts, except on axillaries, wing-lining, and thighs ..... *tristis*, p. 63.
h. Bill very long and slender, as in *Dumeticola* *tytleri*, p. 66.
i. Second primary about equal to the tenth; under mandible pale; underparts yellow .. *affinis*, p. 65.
C. Bill slender; under mandible dark. Two bars across the wings. Generally a pale mesial line on the crown. (Subgeneric group REGULOIDÆ.)
k. Inner web of outside tail-feathers narrowly margined with white or pale grey.
f'. Rump bright yellow, well defined from the olive-green back ..... *proregulus*, p. 71.
g'. Rump nearly uniform in colour with the back.
g''. Second primary generally intermediate in length between the sixth and seventh, very rarely between the seventh and eighth. Mesial line obscure. Eye-stripe yellow or white. Two well-defined wing-bars ..... *superciliosus*, p. 68.
h''. Second primary occasionally intermediate in length between the seventh and eighth, generally between the eighth and ninth, and occasionally between the ninth and tenth. Eye-stripe buff. Upper wing-bar very obscure.. *humii*, p. 67.
i''. Wing-formula as last. Eye-stripe and underparts greenish yellow. Upper wing-bar very obscure ..... *subviridis*, p. 74.
l. Inner web of two and frequently three outside tail-feathers on each side pure white.
h'. Throat greenish yellow; wing-bars orange *pulcher*, p. 73.
i'. Throat pale grey; wing-bars yellow .... *maculipennis*, p. 70.

1. Phylloscopus borealis.

Sylvia (Phyllopneuste) eversmanni, *Bonap. apud Midd. Sibir. Reise*, p. 178 (1851), *apud Radde, Reis. Sibir., Vög.* p. 263 (1863).
Phyllopneuste borealis, *Blas. Naum.* 1858, p. 313; *Swinhoe, P. Z. S.* 1871, p. 356; *Tacz. Bull. Soc. Zool. France*, 1876, p. 141; *Prjev. Rowley's Orn. Misc.* ii. p. 171 (1877); *David et Oust. Ois. Chine*, p. 271 (1877).
Phylloscopus sylvicultrix, *Swinhoe, Ibis*, 1860, p. 53, 1866, p. 295.
Sylvia flavescens, *Gray, P. Z. S.* 1860, p. 349; *id. Hand-l. B.* i. p. 215, no. 3047 (1869).
Phylloscopus hylebata, *Swinhoe, J. A. S. Beng.* xxix. p. 265 (1860).
Sylvia (Phyllopneuste) borealis (*Blas.*), *Naum. Vög. Deutschl.* xiii. p. 69, pl. 375, fig. 1 (1860).
Phylloscopus borealis (*Blas.*), *Blyth, Ibis*, 1867, p. 28; *Seebohm & Harvie Brown, Ibis*, 1876, p. 216; *Hume, Str. F.* iv. p. 290 (1876); *Sharpe, Ibis*, 1877, p. 16; *Seebohm, Ibis*, 1877, p. 69; *Hume, Str. F.* vi. p. 352 (1878); *Seebohm, Ibis*, 1879, p. 9.

Phyllopneuste kennicotti, *Baird, Trans. Chicago Ac. Sc.* i. p. 313, pl. xxx. fig. 2 (1869).
Sylvia sylvicultrix (*Swinhoe*), *Gray, Hand-l. B.* i. p. 216. no. 3054 (1869).
Sylvia borealis (*Blas.*), *Gray, Hand-l. B.* i. p. 216. no. 3063 (1869).
Phyllopneuste eversmanni, *Bonap. apud Alston & Harvie Brown, Ibis*, 1873, p. 61.
Phyllopneuste javanica, *Bonap. apud Salvad. Ucc. Born.* p. 244 (1874).
Phyllopseuste borealis (*Blas.*), *Meves, Journ. Orn.* 1875, p. 429.

Spring plumage. General colour of the upper parts olive, somewhat yellower on the rump; eye-stripe well defined, narrow, greyish white, extending well onto the nape; lores and the feathers behind the eye to the nape dark olive; wing-coverts olive, the median wing-coverts with narrow, and the greater wing-coverts with broad, well-defined greyish-white tips, forming two pale bars across each wing; quills brown, narrowly tipped with greyish white, the outside web edged with yellowish green, entirely absent on the second primary, considerably marginated on the third and fourth, and perceptibly so at the tip of the fifth; tail-feathers brown, the outside web margined with yellowish green, and the inside webs, except those of the two centre feathers, with a narrow well-defined greyish-white margin. General colour of the underparts nearly white, greyer on the breast and flanks, and slightly suffused with yellow, principally on the breast and flanks; axillaries, under wing-coverts, and thighs pale yellow; inner margin of quills nearly white. Bill Acrocephaline, upper mandible dark brown, under mandible pale. Legs, feet, and claws brown. Third and fourth primaries longest; second primary intermediate in length between the fifth and sixth; bastard primary very small, the exposed part measuring 0·3 to 0·35 inch in adults, and 0·4 to 0·45 in birds of the year. Length of wing, male 2·7 to 2·55 inches, female 2·55 to 2·4; tail, male 2·0 to 1·9, female 1·9 to 1·8; culmen 0·45 to 0·55; tarsus 0·8 to 0·7.

Summer plumage. The colour of the upper parts becomes greyer, the yellowish-green edges to the wing and tail-feathers almost disappear, the pale tips vanish, the bars across the wings become indistinct, and most of the yellow disappears from the underparts.

Autumn plumage. Similar to the spring plumage in minor details, but yellower, the underparts being slightly suffused all over with pale greenish yellow. Eye-stripe pale greenish yellow.

Winter plumage. Similar to the summer plumage, but slightly yellower.

The Arctic Willow-Warbler breeds in the north of the Palæarctic Region from Finmark, across Asia to Alaska, towards the northerly limit of forest-growth, and in a similar climate in the subalpine districts of South-eastern Siberia and Mongolia. It passes in great numbers on migration in spring and autumn along the coast of China and Formosa, and winters in the islands of the Malay archipelago, Malacca, Tenasserim, and the South-Andaman islands. An accidental straggler has been shot on Heligoland.

a, b. ♂ ♀ ad. sk.	Kopathjera, R. Dvina, Aug. 8, 1869 (*W. Meves*).	F. Godman and O. Salvin, Esqrs. [P.].
c. ♂ ad. sk.	Yenesay, lat. 66½°, June 23, 1877.	H. Seebohm, Esq. [C.].
d. ♂ ad. sk.	Dauria, May 31, 1873 (*Dr. Dybowsky*).	R. B. Sharpe, Esq. [P.].
e, f. Ad. sk.	Amoy, April (*R. Swinhoe*).	F. Godman and O. Salvin, Esqrs. [P.].
g. Ad. sk.	Amoy.	R. Swinhoe, Esq. [C.].
h. Ad. sk.	Tenasserim.	J. D. C. Packman, Esq. [P.].
i, k. Ad. sk.	N.W. Borneo.	Governor Ussher [C.].
l. Ad. sk.	Sarawak.	H. Everett, Esq. [C.].
m, n. ♀ ad. sk.	Bintulu.	H. Everett, Esq. [C.].
o–s. Ad. sk.	N.W. Borneo.	Hugh Low, Esq. [C.].
t. Ad.	E. Timor.	A. R. Wallace, Esq. [C.].
u. Ad.	Flores.	A. R. Wallace, Esq. [C.].
v, w. Ad.	Batchian.	A. R. Wallace, Esq. [C.]. (Type of *Sylvia flavescens*, Gray.)
x. Ad.	Gilolo.	A. R. Wallace, Esq. [C.].
y. Ad.	Morty Island.	A. R. Wallace, Esq. [C.].
z. ♂ ad. sk.	Berezoff, Obb valley, July 10, 1876.	Dr. O. Finsch [C.].

2. Phylloscopus xanthodryas.

Phylloscopus xanthodryas, *Swinhoe, P. Z. S.* 1863, p. 296; *Seebohm, Ibis*, 1877, p. 71.

Sylvia xanthodryas (*Swinhoe*), *Gray, Hand-l. B.* i. p. 216. no. 3060 (1869).

Phillopneuste trinotaria, *David, Nouv. Arch.* vii. *Bull.* p. 7 (1870).

Phyllopneuste xanthodryas (*Swinhoe*), *Swinhoe, P. Z. S.* 1871, p. 356; *Prjev. Rowley's Orn. Misc.* ii. p. 171 (1877); *David et Oust. Ois. Chine*, p. 268 (1877).

Phyllopseuste xanthodryas (*Swinhoe*), *Gielel, Thes. Orn.* iii. p. 122 (1877).

Spring plumage. General colour of the upper parts olive, slightly yellower on the rump; eye-stripe well defined, narrow, yellowish white, extending to the nape; lores and the feathers behind the eye to the nape dark olive; wing-coverts olive, the median wing-coverts with narrow, and the greater wing-coverts with broad yellowish-white tips, forming an obscure upper wing-bar and a conspicuous lower wing-bar; quills brown, narrowly tipped with greyish white, the outside web edged with green and emarginated as in the preceding species; tail-feathers brown, the outside web margined with green, and the inside web with a narrow well-defined greyish-white margin. General colour of the underparts greenish yellow, greyer on the breast and flanks; axillaries, under wing-coverts, and thighs pale yellow; inner margin of quills greyish white. Bill Acrocephaline; upper mandible dark brown, under mandible pale. Legs, feet, and claws brown. Third and fourth primaries longest; second primary usually intermediate in length between the fifth and sixth, sometimes slightly shorter than the

sixth; bastard primary measuring 0·5 to 0·6 inch. Length of wing, male 2·84 to 2·7 inches, female 2·7 to 2·6; tail, male 2·1 to 1·95, female 1·95 to 1·8; culmen 0·51 to 0·55; tarsus 0·8.

The changes of plumage in this species are similar to those of the preceding species, but at all seasons of the year the general colour of the underparts is much paler in colour in *P. borealis* (Blasius). The smaller size and smaller bastard primary of the latter species serve, however, to distinguish even birds of the year from the present species, though they approach each other very closely.

Swinhoe's Willow-Warbler is said to breed in Kansu and Japan. It passes through South-east China on migration, and winters in Borneo.

a. Ad. sk.	Hakodadi.	Capt. St. John [C.].
b. Ad. sk.	Yokohama (*H. Pryer*).	H. Seebohm, Esq. [P.].

3. Phylloscopus nitidus.

Sylvia icterina, *Vieill.*, *Hodgs. MS. Drawings* (*in the Brit. Mus.*) *of B. of Nepal, Passeres*, pl. 55. no. 385 (*circ.* 1840).
Sylvia hippolais (*Linn.*), *apud Jerdon, Madr. Journ.* xi. p. 6 (1840).
Phylloscopus nitidus, *Blyth, J. A. S. Beng.* xii. p. 965 (1843); *id. J. A. S. Beng.* xiv. p. 591 (1845); *id. Cat. B. Mus. As. Soc.* p. 184 (1849); *Jerdon, B. India*, ii. p. 193 (1863); *Holdsworth, P. Z. S.* 1872, p. 457; *Hume, Str. F.* 1873, p. 197; *Legge, Ibis*, 1874, p. 22; *Seebohm, Ibis*, 1877, p. 72.
Regulus nitidus (*Blyth*), *Gray, Gen. B.* i. p. 175 (1848).
Abrornis nitidus (*Blyth*), *Bp. Consp.* i. p. 290 (1850).
Sylvia nitida (*Blyth*), *Gray, Hand-l. B.* i. p. 215. no. 3050 (1869).
Phyllopseuste nitida (*Blyth*), *Adam, Str. F.* 1873, p. 382; *Giebel, Thes. Orn.* iii. p. 119 (1877).

Spring plumage. General colour of the upper parts yellowish green; a well-defined primrose-yellow eye-stripe extends from the base of the bill to the nape; lores and the feathers behind the eye to the nape olive; lesser wing-coverts yellowish green; median wing-coverts brown, edged externally with yellowish green and with very indistinct pale tips; greater wing-coverts brown, edged externally with yellowish green, and distinctly tipped on the outside web with pale yellow, forming a conspicuous pale bar across the wing; primary-coverts and quills, including the innermost secondaries, brown, the outside web margined with yellowish green, and emarginated as in the two preceding species; secondaries and most of the primaries narrowly tipped with greyish white; tail-feathers brown, the outside webs margined with yellowish green, and the inside webs, except those of the two centre feathers, with narrow well-defined greyish-white margin. General colour of the underparts primrose-yellow, including the under wing-coverts and axillaries; thighs and under tail-coverts slightly paler; inner margin of quills nearly white. Bill Acrocephaline; upper mandible dark brown, under mandible pale, slightly darker towards the tip. Legs, feet, and claws brown. Third and fourth primaries longest;

second primary intermediate in length between the sixth and seventh; the exposed part of the bastard primary measures 0·55 to 0·6 inch. Length of wing, male 2·6 to 2·45 inches, female 2·45 to 2·3; tail, male 2·0 to 1·9, female 1·85 to 1·75; culmen 0·5; tarsus 0·79 to 0·73.

Summer plumage unknown, but probably not suffering much by abrasion.

Autumn plumage. Similar to the spring plumage in minor details, the upper parts very slightly darker in shade, and the underparts a somewhat deeper yellow.

Winter plumage. Similar to the autumn plumage, but with the wing-bar more or less lost by abrasion, and the pale tips to the quills seldom remaining.

So far as is known, the Green Willow-Warbler has a very restricted range, probably breeding in the north-western Himalayas, and wintering in Bengal, Southern India, and Ceylon. An accidental straggler has been shot on Heligoland.

a. Ad. sk.	N.W. India (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
b. ♀ ad. sk.	Futtighur, N.W. India, Oct. 25, 1869 (*A. Anderson*).	Henry Seebohm, Esq. [P.].
c. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
d. Ad. sk.	Madras.	Dr. Jerdon [P.].

4. Phylloscopus viridanus.

Phyllopneuste rufa (*Lath.*), *apud Blyth, J. A. S. Beng.* xi. p. 191 (1842).

Phylloscopus viridanus, *Blyth, J. A. S. Beng.* xii. p. 967 (1843), xiv. p. 591 (1845); *id. Cat. B. Mus. As. Soc.* p. 185 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 338 (1854); *Jerdon, B. Ind.* ii. p. 193 (1863); *Brooks, Ibis*, 1872, p. 31; *Hume & Henders. Lahore to Yark.* p. 220, pl. xix. (1873); *Scully, Str. F.* iv. p. 148 (1876); *Seebohm, Ibis*, 1877, p. 73; *Hume, Str. F.* vi. p. 356 (1878).

Phyllopneuste affinis, *Blyth, Ann. Nat. Hist.* xii. p. 98 (1843, *nec Tickell*).

Phyllopneuste viridanus (*Blyth*), *Gray, App. Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 152 (1846); *Blyth & Wald. B. Burm.* p. 105 (1875).

Regulus viridanus (*Blyth*), *Gray, Gen. B.* i. p. 175 (1848).

Abrornis viridana (*Blyth*), *Bp. Consp.* i. p. 290 (1850).

Sylvia viridana (*Blyth*), *Gray, Hand-l. B.* i. p. 217. no. 3074 (1869).

Phylloscopus seebohmi, *Hume, Str. F.* v. p. 335 (1877), vi. p. 356 (1878).

Phyllopseuste viridana (*Blyth*), *Giebel, Thes. Orn.* iii. p. 122 (1877).

Spring plumage. General colour of the upper parts olive, very slightly greener on the rump; eye-stripe narrow, well defined, dull yellowish white, reaching to the nape; lores and the feathers behind the eye olive; wing-coverts olive, the greater coverts with pale yellowish-white tips on the outer webs, forming a conspicuous wing-bar; quills brown, with very narrow pale tips, the outside webs edged with olive, and emarginated as in the three preceding species;

tail-feathers brown, the outside webs margined with olive, and the inside webs, except those of the two centre feathers, having a narrow well-defined greyish-white margin. General colour of the underparts nearly white, greyer on the breast and flanks, and slightly suffused with yellow; axillaries, under wing-coverts, and thighs pale yellow; inner margin of quills greyish white. Bill Acrocephaline; upper mandible dark brown, under mandible pale. Legs, feet, and claws bluish brown. Third, fourth, and fifth primaries longest; second primary generally intermediate in length between the seventh and eighth, in rare instances between the sixth and seventh; exposed portion of the bastard primary 0·5 to 0·65 inch. Length of wing, male 2·5 to 2·3 inches, female 2·3 to 2·18; tail, male 2·05 to 1·9, female 1·9 to 1·8; culmen 0·45 to 0·5; tarsus 0·75.

Summer plumage. The colour of the upper parts becomes greyer by abrasion, the pale tips to the quills are lost, the lower wing-bar becomes narrow and obscure, and nearly all trace of yellow on the underparts is abraded.

Autumn plumage. Similar to the spring plumage, but having the eye-stripe, the wing-bar, and the underparts suffused with pale greenish yellow, causing the upper wing-bar to be very obscure.

Winter plumage. The changes which take place by abrasion are similar to those which take place in summer. The wing-bar is often entirely lost; but the underparts generally retain some of the greenish yellow.

The Indian Willow-Warbler breeds in Cashmere, and winters in the plains of India. An example was obtained by Meves in the Ural mountains, and another on Heligoland by Ludwig Gätke.

a, *b*. Ad. sk.	Simla.	Capt. Stackhouse Pinwill [P.].
c. Ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
d, *e*. Ad. sk.	N.W. Himalayas (*Capt. G. Marshall*).	R. B. Sharpe, Esq. [P.].
f. Ad. sk.	Murree.	Capt. J. Biddulph [C.].
g. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
h, *i*. ♀ ad. sk.	Futtighur, N.W. India, Sept. 14–16 (*A. Anderson*).	Henry Seebohm, Esq. [P.].
k. Ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
l, *m*. Ad. sk.	Madras.	Dr. Jerdon [P.].

5. Phylloscopus plumbeitarsus.

Sylvia (Phyllopneuste) coronata (*Temm.*), *apud Midd. Sibir. Reise, Vög.* p. 182 (1851), *apud Radde, Reis. Sibir., Vög.* p. 263 (1863).
Phylloscopus plumbeitarsus, *Swinhoe, Ibis*, 1861, p. 330; *Seebohm, Ibis*, 1877, p. 76; *Hume, Str. F.* vi. p. 355 (1878).
Sylvia plumbeitarsa (*Swinh.*), *Gray, Hand-l. B.* i. p. 216. no. 3061 (1869).
Phyllopneustes middendorfii, *Meves, Öfv. k. Vet.-Ak. Förh.* 1871, p. 758.

Phyllopneuste plumbeitarsa (*Swinh.*), *Swinhoe, P. Z. S.* 1871, p. 356; *Homeyer, Journ. Orn.* 1872, p. 206; *Prjev. Rowley's Orn. Misc.* ii. p. 171 (1877); *David et Oust. Ois. Chine*, p. 270 (1877).
Phyllopneuste (Phyllobasileus) coronatus (*Temm.*), *apud Homeyer, Journ. Orn.* 1872, p. 207.
Phylloscopus excoronatus, *Homeyer, Journ. Orn.* 1872, p. 207.
Phyllopneuste intermedia, *Severtz. Turkest. Jevotn.* p. 125 (1873, *see Ibis*, 1876, p. 81).
Hypolais graminis, *Severtz. loc. cit.* (1873).
Phyllopneuste middendorfii (*Meves*), *Tacz. Bull. Soc. Zool. France*, 1876, p. 140.
Phyllopseuste plumbeitarsa (*Swinhoe*), *Giebel, Thes. Orn.* iii. p. 120 (1877).

This species differs from the preceding solely in having the median as well as the greater wing-coverts with pale tips. It appears to me to be a very doubtful species; and if Severtzoff's *Phyllopneuste intermedia* should really prove to be an intermediate form between it and *P. viridanus*, Blyth, it will have to be degraded to the rank of a subspecies. I have not seen Severtzoff's types.

Middendorff's Willow-Warbler breeds in Turkestan and South Siberia, from the Ural mountains to the Amoor. It passes through the island of Hainan on migration, and winters in the Burma peninsula.

a. ♀ ad. sk. Lake Baical, July 7, 1870 (*Dr. Dybowsky*). H. Seebohm, Esq. [P.]

6. Phylloscopus tenellipes.

Phylloscopus tenellipes, *Swinhoe, Ibis*, 1860, p. 53; *Seebohm, Ibis*, 1877, p. 75; *Hume, Str. F.* vi. p. 354 (1878).
Sylvia tenellipes (*Swinhoe*), *Gray, Hand-l. B.* i. p. 216, no. 3059 (1869).
Phyllopneuste tenellipes (*Swinhoe*), *Swinhoe, P. Z. S.* 1871, p. 356; *David et Oust. Ois. Chine*, p. 269 (1877).
Phyllopseuste tenellipes (*Swinhoe*), *Giebel, Thes. Orn.* iii. p. 121 (1877).

Spring plumage. General colour of the upper parts olive-brown, darker on the head, and shading into russet-brown on the rump; eye-stripe narrow, well defined, greyish white, extending well onto the nape; lores and the feathers behind the eye dark olive-brown; wing-coverts brown, the lesser coverts broadly edged with buffish brown, the median coverts paler at the tips, forming an obscure upper wing-bar, the greater coverts with broad buffish-white tips to the outer webs, forming a distinct lower wing-bar; quills brown, narrowly tipped with buffish white, and edged on the outside webs with pale buffish brown, the sixth quill perceptibly emarginated as well as the preceding quills. Tail-feathers brown, the outside webs margined with pale buffish brown, and the inside webs with buffish white. General colour of the underparts white, shading into pale greyish buff on the breast, flanks, and under tail-coverts; axillaries and under wing-coverts pale yellow; inner margin of quills pale buff. Bill slender, Acrocephaline; upper mandible dark brown, lower mandible pale. Legs, feet, and claws pale flesh-colour. Third,

fourth, and fifth primaries longest; second primary equal to the seventh; bastard primary 0·5 to 0·53 inch. Length of wing, male 2·5 to 2·35 inches, female 2·35 to 2·2; tail, male 2·0 to 1·9, female 1·9 to 1·8; culmen 0·5; tarsus 0·73.

Summer plumage. Upper and underparts greyer; wing-bars more or less lost by abrasion; the pale tips to the quills have disappeared.

Autumn plumage. The olive-brown of the upper parts replaced by russet-brown; eye-stripe and underparts more suffused with buff.

Winter plumage. Somewhat buffer than the summer plumage.

The Pale-legged Willow-Warbler is supposed to breed in Japan, to pass through China on migration, and to winter in the Burma peninsula.

The British Museum does not possess a skin of this species. The type is in the Swinhoe collection in my possession, and other examples are in the collection of Allan Hume, Esq.

7. Phylloscopus magnirostris.

Phylloscopus magnirostris, *Blyth, J. A. S. Beng.* xii. p. 966 (1843); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 336 (1854); *Jerdon, B. Ind.* ii. p. 191 (1863); *Brooks, J. A. S. Beng.* xli. pt. 2, p. 79 (1872); *Brooks, Ibis*, 1872, p. 26; *Legge, Ibis*, 1874, p. 22; *Seebohm, Ibis*, 1877, p. 77; *Hume, Str. F.* vi. p. 352 (1878); *Legge, Birds of Ceylon*, p. 553 (1879).

Phylloscopus javanicus (*Horsf.*), *apud Blyth, J. A. S. Beng.* xiii. p. 393 (1844), *apud Blyth, J. A. S. Beng.* xiv. p. 591 (1845), *apud Blyth, Cat. B. Mus. As. Soc.* p. 185 (1849).

Phylloscopus indicus (*Jerdon*), *apud Blyth, J. A. S. Beng.* xiv. p. 593 (1845, *partim*).

Sylvia magnirostris (*Blyth*), *Gray, Hand-l. B.* i. p. 216. no. 3056 (1869); *Gray, op. cit.* i. p. 217. no. 3081 (1869).

Phyllopseuste javanica (*Bonap.*), *apud Giebel, Thes. Orn.* iii. p. 119 (1877).

Spring plumage. General colour of the upper parts dark olive-green, slightly darker on the head and somewhat greener on the rump; eye-stripe well defined, pale yellowish white, extending to the nape; lores and the feathers behind the eye dark olive; wing-coverts brown, the lesser coverts broadly edged with olive, the median coverts paler at the tip, forming an indistinct upper wing-bar, greater coverts with pale yellowish-white tips to the outer webs, forming a conspicuous lower wing-bar; quills brown, the outer webs edged with olive-green and emarginated as far as the sixth; tail-feathers brown, the outside webs margined with olive, and the inside webs, except those of the two centre feathers, with a narrow greyish-white margin. General colour of the underparts pale greyish yellow, greyest on the breast and flanks; axillaries, under wing-coverts, and thighs greyish yellow; inner margin of quills pale buff. Bill Acrocephaline, much decurved at the tip, with the rictal bristles well developed, approaching the Muscicapine type; upper mandible dark brown, under mandible pale, darker towards the tip. Legs, feet, and claws bluish brown. Fourth and fifth primaries longest;

second primary intermediate in length between the seventh and eighth; exposed portion of bastard primary 0·6 to 0·75 inch. Length of wing, male 2·83 to 2·6 inches, female 2·6 to 2·4; tail, male 2·3 to 2·15, female 2·15 to 2·0; culmen 0·55 to 0·6; tarsus 0·75.

Summer plumage. In abraded plumage the general colour becomes slightly greyer, the greener margins to the quills are nearly lost, and seldom more than traces of the wing-bars remain.

Autumn plumage. This scarcely differs from the spring plumage, except in having the eye-stripe somewhat yellower and the general colour of the underparts not quite so pale.

Winter plumage. Similar to the summer plumage, but somewhat greener above and slightly yellower below.

The Large-billed Willow-Warbler appears to be almost exclusively an Indian species, breeding in Cashmere, and passing through the North-west Provinces on migration. In winter it is found sparingly near Calcutta and Lower Bengal, and is generally distributed over Western, Central, and Southern India as far south as Ceylon. On the eastern coast of the Bay of Bengal it has been found as far as Chusan, and it has been obtained on the South-Andaman islands.

a. ♂ ad. sk. Cashmere (*Brooks*). Henry Seebohm, Esq. [P.].

8. Phylloscopus lugubris.

Phyllopneuste lugubris, *Blyth, Ann. Nat. Hist.* xii. p. 98 (1843); *Blyth & Wald. B. Burm.* p. 105 (1875).

Phylloscopus lugubris (*Blyth*), *Blyth, J. A. S. Beng.* xii. p. 968 (1843); *id. J. A. S. Beng.* xiv. p. 591 (1845); *id. Cat. B. Mus. As. Soc.* p. 185 (1849); *Jerdon, B. Ind.* ii. p. 192 (1863); *Blanf. J. A. S. Beng.* xli. pt. 2, p. 53 (1872); *Seebohm, Ibis*, 1877, p. 78; *Hume, Str. F.* vi. p. 355 (1878).

Phyllopneuste trochilus (*Linn.*), *apud Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 57. no. 861, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 861 (1844), *apud Gray, Cat. Mamm. & B. Nepal Coll. Hodgs.* p. 65 (1846).

Phylloscopus indicus (*Jerdon*), *apud Blyth, J. A. S. Beng.* xiv. p. 593 (1845, *partim*).

Phyllopneuste magnirostris (*Blyth*), *apud Gray, App. Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 151 (1846).

Regulus lugubris (*Blyth*), *Gray, Gen. B.* i. p. 175 (1848).

Abrornis lugubris (*Blyth*), *Bp. Consp.* i. p. 290 (1850).

Sylvia lugubris (*Blyth*), *Gray, Hand-l. B.* i. p. 215. no. 3049 (1869).

Phyllopseuste lugubris (*Blyth*), *Giebel, Thes. Orn.* iii. p. 119 (1877).

This species is very closely allied to the preceding, being absolutely identical in colour and in its seasonal changes of plumage, and would scarcely be entitled to specific rank were it not that it appears to have a more eastern geographical range. It is a slightly smaller bird, with a somewhat more rounded wing. The fourth and fifth primaries are longest, and the second primary is about equal to the tenth; exposed portion of bastard primary 0·7 to 0·8 inch. Length of wing, male 2·6 to 2·4 inches, female 2·4 to 2·25; tail, male 2·35 to 2·0, female 2·0 to 1·85; culmen 0·45 to 0·5; tarsus 0·85 to 0·75.

Blyth's Willow-Warbler probably breeds in the Eastern Himalayas, not having been found further west than Nepal. It winters in Lower Bengal, Assam, Pegu, and the Tenasserim Provinces, and has been found in the Philippines.

a, *b*, *c*, *d*, *e*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
f. Ad. sk.	Sikkim (*Mandelli*).	Henry Seebohm, Esq. [P.].
g. Ad. sk.	Bhaman, Upper Burma.	Dr. J. Anderson [C.].
h. Ad. sk.	Calcutta.	E. Blyth, Esq. [P.].

9. Phylloscopus coronatus.

Phylloscopus coronatus (*Temm.*).
Ficedula coronata, *Temm. et Schl. Fauna Jap., Aves*, p. 48, pl. xviii. (1847).
Sylvia coronata (*T. & S.*), *Gray, Gen. B.* i. p. 174 (1848); *Gray, Hand-l. B.* i. p. 216. no. 3055 (1869).
Phyllopneuste coronata (*Temm.*), *Bp. Consp.* i. p. 290 (1850); *Swinh. P. Z. S.* 1871, p. 356; *Tacz. Bull. Soc. Zool. France*, 1876, p. 141; *Dav. et Oust. Ois. Chine*, p. 269 (1877).
Phylloscopus coronatus (*Temm.*), *Swinh. Ibis*, 1863, p. 93; *Seebohm, Ibis*, 1877, p. 79.
Phyllopseuste coronata (*Temm.*), *Giebel, Thes. Orn.* iii. p. 118 (1877).
Reguloides coronata (*Temm.*), *Hume & Davison, Str. F.* vi. p. 356 (1878).

Spring plumage. General colour of the upper parts olive-green, slightly yellower on the rump and upper tail-coverts; a well-defined, narrow, greyish-white eye-stripe extends from the base of the bill to the nape; an irregular greyish-white mesial line extends from the forehead to the nape; the forehead, the feathers before the eye and behind the eye to the nape, and the crown and nape between the mesial line and each eye-stripe dark olive-green; wing-coverts olive-green, the median wing-coverts with narrow and the greater wing-coverts with broad, well-defined greyish-white tips, forming two pale bars across each wing; quills brown, narrowly tipped with greyish white, the outside webs edged with yellowish green and emarginated as far as the fifth; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs, except those of the two centre feathers, with a narrow well-defined greyish-white margin. General colour of the underparts white, suffused with yellow and grey on the breast and flanks; axillaries, under wing-coverts, thighs, and under tail-coverts pale yellow, contrasting with the pure white of the belly; inner margin of quills buffish white. Bill Acrocephaline; upper mandible dark brown, under mandible pale, slightly darker towards the tip. Legs, feet, and claws light brown. Third and fourth primaries longest; second primary slightly shorter than the sixth, but considerably longer than the seventh; the exposed part of the bastard primary measures 0·5 to 0·55 inch. Length of wing, male 2·55 to 2·4 inches, female 2·4 to 2·25; length of tail, male 2·0 to 1·9, female 1·9 to 1·8; length of culmen 0·48 to 0·55.

Summer plumage. Upper parts greyer; most of the yellow on the breast and flanks abraded; upper wing-bar often nearly lost; lower

wing-bar less distinct; light tips to the quills entirely abraded; yellowish-green edges of the quills and tail-feathers much greyer.

Autumn plumage. Similar to the spring plumage in minor details, but yellower, the upper parts being green rather than olive-green, and the underparts suffused all over with greenish yellow; the eye-stripes and the mesial line on the crown are greenish yellow instead of greyish white.

Winter plumage. Similar to the summer plumage, but yellower.

Temminck's Crowned Willow-Warbler breeds in Japan, in the valley of the Ussuri, and in the subalpine districts of South-eastern Siberia; passes along the coasts of China and Formosa on migration, and winters in Java and Malacca. An accidental straggler has been shot on Heligoland.

a, *b*. Ad. sk.	Yokohama, Japan.	Henry Seebohm, Esq. [P.].
c. Ad., *d*. Juv. sk.	Yokohama, Japan.	H. Pryer, Esq. [C.].

10. Phylloscopus occipitalis.

Phylloscopus occipitalis (*Blyth*).

Hippolais swainsoni, *Hodgs. MS. Drawings* (*in the Brit. Mus.*) *of B. of Nepal, Passeres*, pl. 58. fig. 6, no. 385, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 385 (*circ.* 1844, *descr. nulla, partim*).

Phyllopneuste occipitalis, *Jerdon, fide Blyth, J. A. S. Beng.* xiv. p. 593 (1845); *Jerdon, fide Blyth, Cat. B. Mus. As. Soc.* p. 183 (1849).

Culicepeta occipitalis (*Jerdon*), *fide Blyth, J. A. S. Beng.* xvi. p. 442 (1847).

Reguloides occipitalis (*Jerdon*), *fide Jerdon, B. Ind.* ii. p. 196 (1863); *Brooks, Ibis*, 1869, p. 457; *id. Ibis*, 1872, p. 29; *Cock & Marshall, Str. F.* 1873, p. 355; *Hume, Nests & Eggs Ind. B.* p. 362 (1873).

Sylvia validirostris, *Jerdon, fide Gray, Hand-l. B.* i. p. 216. no. 3064 (1869).

Sylvia occipitalis, *Jerdon, fide Gray, Hand-l. B.* i. p. 217. no. 3085 (1869).

Phylloscopus trochiloides (*Sund.*) *apud Seebohm, Ibis*, 1877, p. 81.

Phylloscopus occipitalis, *Jerdon, fide Seebohm, Ibis*, 1877, p. 80.

Phyllopseuste occipitalis (*Blyth*), *Giebel, Thes. Orn.* iii. p. 119 (1877).

Spring plumage. General colour of the upper parts olive-green, slightly yellower on the rump and upper tail-coverts; a well-defined narrow yellowish-white eye-stripe extends from the base of bill to the nape; an irregular yellowish-white mesial line extends from the forehead to the nape; the forehead, the feathers before the eye and behind the eye to the nape, and the crown and nape between the mesial line and each eye-stripe dark olive-green; wing-coverts olive-green, the median wing-coverts with narrow, and the greater wing-coverts with broad well-defined greyish-white tips, forming two pale bars across each wing; quills brown, narrowly tipped with greyish white, the outside webs edged with yellowish green, and emarginated as far as the sixth; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs, except those of the two centre feathers, with a narrow well-defined greyish-white margin. General colour of the underparts greyish

white, very slightly suffused with yellow, greyest on the breast and flanks; axillaries, under wing-coverts, and thighs pale yellow; inner margin of quills buffish white. Bill Acrocephaline; upper mandible dark brown, under mandible pale, slightly darker towards the tip. Legs, feet, and claws light brown. Third, fourth, and fifth primaries nearly equal and longest; second primary intermediate in length between the seventh and eighth; the exposed part of the bastard primary measures 0·55 to 0·7 inch. Length of wing, male 2·65 to 2·5 inches, female 2·5 to 2·3; length of tail, male 2·15 to 2·0, female 2·0 to 1·9; length of culmen 0·5 to 0·58.

Summer plumage. Upper parts greyer; most of the yellow on the breast and flanks abraded; upper wing-bar often nearly lost; lower wing-bar less distinct. Light tips to the quills entirely abraded; yellowish-green edges of the quills and tail-feathers much greyer.

Autumn plumage. Similar to the spring plumage in minor details, but yellower, the upper parts being yellowish green rather than olive-green, and the underparts suffused all over with pale yellow; the eye-stripes and the mesial line on the crown are pale yellow instead of yellowish white.

Winter plumage. Similar to the summer plumage, but yellower.

Jerdon's Crowned Willow-Warbler breeds in Cashmere, and eastwards throughout the Himalayas. Winters in Lower Bengal and the Tenasserim provinces.

a. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Duplicate type of *Hippolais swainsoni*, Hodgs.)
b. ♀ ad. sk.	Futtigurh, N.W. India, Apr. 7 (*A. Anderson*).	Henry Seebohm, Esq. [P.].
c, d. Ad. sk.	Cashmere (*Dr. Bellew*).	India Museum.
e. Ad. sk.	Madras.	Dr. Jerdon. (Type of *Sylvia validirostris*, Jerdon, *fide* Gray.)

11. Phylloscopus reguloides.

Phyllopneuste reguloides, *Blyth, J. A. S. Beng.* xi. p. 191 (1842); *id. Ann. Nat. Hist.* xii. p. 98 (1843); *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 59, and *App.* pl. 43. no. 862, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 862 (1844).

Phylloscopus reguloides (*Blyth*), *Blyth, J. A. S. Beng.* xii. p. 963 (1843).

Phyllopneuste nitidus (*Blyth*) *apud Gray, Cat. Mamm. & B. Nepal Coll. Hodgs.* p. 66 (1846).

Acanthiza trochiloides, *Sundev. Ann. Nat. Hist.* xviii. p. 252 (1846).

Culicapeta trochiloides (*Sund.*), *Blyth, J. A. S. Beng.* xvi. p. 442 (1847).

Regulus trochiloides (*Sund.*), *Gray, Gen. B.* i. p. 175 (1848).

Reguloides trochiloides (*Sund.*), *Blyth, Cat. B. Mus. As. Soc.* p. 184 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 343 (1854); *Jerdon, B. India*, ii. p. 196 (1863); *Beavan, Ibis*, 1868, p. 73; *Brooks, Ibis*, 1869, p. 458; *Blyth & Walden, B. Burm.* p. 105 (1875).

Abrornis trochiloides (*Sund.*), *Bp. Consp.* i. p. 290 (1850).

Phyllobasileus trochiloides (*Sund.*), *Cabanis, Journ. Orn.* 1853, p. 96.

Reguloides viridipennis (*Blyth*) *apud Jerdon, B. of India*, ii. p. 198 (1863); *Scully, Str. F.* iv. p. 149 (1876); *David et Oust. Ois. Chine*, p. 276 (1877).

Sylvia trochiloides (*Sund.*), *Gray, Hand-l. B.* i. p. 217. no. 3080 (1869).
Phylloscopus viridipennis (*Blyth*) *apud Seebohm, Ibis*, 1877, p. 82.
Phylloscopus (Reguloides) flavo-olivaceus, *Hume, Str. F.* v. p. 504 (1877).
Phyllopneuste viridipennis (*Blyth*) *apud Giebel, Thes. Orn.* iii. p. 122 (1877).
Reguloides flavo-olivaceus (*Hume*), *Hume, Str. F.* vi. p. 358 (1878).

Spring plumage. General colour of the upper parts olive-green, very slightly yellower on the rump and upper tail-coverts; eye-stripe well-defined, pale yellow, and extending well on to the nape; mesial line on the crown pale olive-green, ill-defined, extending as far as the nape; lores, the feathers behind the eye, the head and nape between the mesial line and each eye-stripe dark olive, sharply defined from the paler back; wing-coverts brown, broadly edged with olive-green, the median wing-coverts with narrow yellow tips, and the greater wing-coverts with narrow yellow tips on the inside webs, and broad yellow tips on the outside webs, forming a very conspicuous lower bar and a much less conspicuous upper bar across the wings; quills brown, with very narrow pale tips, the outside webs edged with yellowish green, and emarginated as far as the sixth; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs with a narrow well-defined greyish-white margin, which on the two outside feathers on each side becomes broader, still more sharply defined, and almost pure white. General colour of the underparts greyish white, whitest on the centre of the belly, and more or less suffused with yellow throughout; axillaries, under wing-coverts, and thighs bright yellow; inner margin of quills buffish white. Bill Acrocephaline; upper mandible dark brown, under mandible pale. Legs, feet, and claws dark. Third, fourth, and fifth primaries nearly equal and longest; second primary about equal to the tenth; the exposed part of the bastard primary measures 0·65 to 0·55 inch. Length of wing, male 2·4 to 2·25 inches, female 2·25 to 2·1; length of tail, male 2·0 to 1·85, female 1·28 to 1·7; length of culmen 0·4 to 0·46.

Summer plumage. Greyer above and below, with the wing-bars more or less abraded.

Autumn plumage. After the autumn moult, the olive-green of the upper parts is replaced by yellowish green, the eye-stripe and the wing-bars are a brighter yellow, and the underparts are still more suffused with yellow than they are in spring.

Winter plumage. The changes produced by abrasion in winter are very similar to those produced in summer.

Blyth's Crowned Willow-Warbler is supposed to breed in the alpine districts of the Himalayas from Nepal eastwards. It winters in both the Indian and Burma peninsulas.

a–i. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
k, l, m. Ad. sk.	Nepal (*Hodgson*).	India Museum.
n. Ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
o. Ad. sk.	Calcutta.	E. Blyth, Esq. [P.].
p. ♂ ad. sk.	Nampung, Kakhyen hills, Feb. 19, 1875.	Dr. Anderson [U.].

12. Phylloscopus viridipennis.

Phylloscopus viridipennis (*Blyth*) *.
Muscicapa presbytis, *S. Müller, Tydschr. v. Nat. Gesch. en Phys.* ii. p. 331 (1835, *descr. nulla*).
Phylloscopus viridipennis, *Blyth, J. A. S. Beng.* xxiv. p. 275 (1856).
Gerygone superciliosa, *Wallace, P. Z. S.* 1863, p. 491.
Sylvia presbytis (*Müll.*), *Gray, Hand-l. B.* i. p. 216. no. 3062 (1869); *Blyth, Ibis*, 1870, p. 169.
Acanthiza superciliosa (*Wall.*), *Gray, Hand-l. B.* i. p. 219. no. 3133 (1869).
Sylvia viridipennis (*Blyth*), *Gray, Hand-l. B.* i. p. 217. no. 3092 (1869).
Reguloides viridipennis (*Blyth*), *Blyth & Walden, B. Burm.* p. 106 (1875); *Hume, Str. F.* v. p. 330 (1877); *id. Str. F.* vi. p. 358 (1878).
Phylloscopus presbytis (*Müll.*), *Seebohm, Ibis*, 1877, p. 83.
Phyllopseuste presbytis (*Müll.*), *Giebel, Thes. Orn.* iii. p. 120 (1877).

Spring plumage. General colour of the upper parts olive-green, slightly yellower on the rump; eye-stripe pale greenish yellow, well-defined, and extending well on to the nape; an indistinct ill-defined pale mesial line on the crown; crown between the mesial line and the eye-stripes, lores, and transocular stripe dark olive, extending across the nape and sharply defined from the paler back; wing-coverts brown, edged externally with yellowish green; the median wing-coverts with ill-defined pale tips, forming an obscure bar across the wing; the greater wing-coverts with well-defined pale greenish-white tips to the inside webs, forming a conspicuous lower wing-bar; quills brown, very narrowly tipped with greyish white, the outside webs edged with yellowish green and emarginated as far as the sixth; tail-feathers brown, the outside webs margined with yellowish green, and the inside webs of the outside feathers white, sometimes extending over three outside feathers on each side, and occasionally including the shaft and the basal portion of the outside web. General colour of the underparts a uniform greyish white, slightly suffused all over with yellow; axillaries, under wing-coverts, and thighs pale yellow; inner margin of quills buffish white. Bill Acrocephaline; upper mandible dark brown, under mandible pale. Legs, feet, and claws brown. Fourth and fifth primaries longest; second primary intermediate in length between the ninth and twelfth; the exposed part of the bastard primary measures 0·55 to 0·7 inch. Length of wing, male 2·2 to 2·05 inches, female 2·05 to 1·9; length of tail, male 1·85 to 1·7, female 1·7 to 1·55; length of culmen 0·45 to 0·5.

* The specific name of *presbytis* may possibly be the oldest name given to this bird; but since no description was published until Blyth described the types in the Leyden Museum in 1870, it must give way to Blyth's earlier name of *viridipennis*, which dates from 1856. It is also doubtful whether the birds labelled *Sylvia presbytis* in the Leyden Museum are the types to which Müller gave the name of *Muscicapa presbytis*, inasmuch as they are all marked with the locality of "Timor," and Müller (*loc. cit.*) only mentions the name as belonging to a bird which he obtained on Sumatra.

Summer plumage. The pale edges to the primaries are soon lost by abrasion, the wing-bars become narrow and obscure, and the underparts lose much of their yellow.

Autumn plumage. After the autumn moult the underparts become pale primrose-yellow, except on the throat, which still shows much greyish white mixed with the yellow.

Winter plumage. The yellow of the underparts below the breast is never quite lost by abrasion, though the eye-stripe and the remains of the wing-bars fade to nearly white.

Wallace's Crowned Willow-Warbler breeds in the mountains of British Burma, and winters in the plains, ranging also as far as Timor and probably Sumatra.

a. ♂ ad. sk.	E. Timor.	A. R. Wallace, Esq. [C.]. (Type of *Gerygone superciliosa*, Wall.)
b, *c*. Ad. sk.	E. Timor.	A. R. Wallace, Esq. [C.].

13. Phylloscopus sibilatrix.

Phylloscopus sibilatrix (*Bechst.*).
Le grand Pouillot, *Brisson, Orn.* iii. p. 482 (1760).
Yellow Wren, var. C, *Lath. Gen. Syn.* ii. p. 514 (1783).
Motacilla sibilatrix, *Bechst. Naturg. Deutschl.* iv. p. 688 (1795).
Sylvia sylvicola, *Mont. Trans. Linn. Soc.* iv. p. 35 (1798); *Lath. Ind. Orn. Suppl.* p. liii (1801); *Turton, Brit. Faun.* p. 44 (1807); *Leach, Cat. Mamm. &c. Brit. Mus.* p. 24 (1816); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 239 (1817); *Roux, Orn. Prov.* pl. 225 (1825); *Yarr. Brit. B.* i. p. 297 (1843); *Gray, Hand-l. B.* i. p. 213. no. 3016 (1869).
Sylvia sibilatrix (*Bechst.*), *Bechst. Orn. Taschenb.* i. p. 176 (1802); *Wolf, Taschenb.* i. p. 247 (1810); *Temm. Man. d'Orn.* i. p 223 (1820); *Boie, Isis*, 1822, p. 553; *Naum. Vög. Deutschl.* iii. p. 556, pl. 80. fig. 2 (1823); *Temm. Man. d'Orn.* iii. p. 149 (1835); *Gould, Birds Eur.* ii. pl. 131. fig. 3 (1837); *Nordm. in Demid. Voy. Russ. mérid.* iii. p. 140 (1840); *Bonap. Faun. Ital. Uce.* pl. 27. fig. 1 (1841); *Werner's Atlas, Insectivores*, pl. 54 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Hewits. Eggs Brit. B.* i. p. 135, pl. 36. fig. 3 (1856); *Sundev. Sc. Fogl.* pl. 14. fig. 2 (1858).
Motacilla sylvatica, *Turton, Linn. Gen. Syst. Nat.* i. p. 587 (1806).
Ficedula sibilatrix (*Bechst.*), *Koch, Syst. baier. Zool.* i. p. 159 (1816); *Keys. u. Blas. Wirb. Eur.* p. 184 (1840); *Schleg. Bijdr. Dierk. Amsterd.* p. 28, pl. 12. fig. 5 (1848); *id. Vog. Nederl.* pl. 72 (1854); *Linderm. Vög. Griechenl.* p. 97 (1860).
Trochilus major, *Forst. Synopt. Cat.* p. 54 (1817).
Curruca sibilatrix (*Bechst.*), *Fleming, Brit. An.* p. 70 (1828).
Sibilatrix sibilatrix (*Bechst.*), *Kaup, Natürl. Syst.* p. 98 (1829).
Phyllopneuste sibilatrix (*Bechst.*), *Brehm, Vog. Deutschl.* p. 425 (1831); *Bp. Comp. List B. Eur. & N. Amer.* p. 13 (1838); *Bp. Consp.* i. p. 289 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 265 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 548 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 250 (1867); *Tristram, Ibis*, 1867, p. 83; *Fritsch, Vög. Eur.* pl. 19. fig. 18 (1871); *Gould, B. Gt. Brit.* pl. 67 (1873).
Phyllopneuste megarhynchos, *Brehm, Vög. Deutschl.* p. 425 (1831).

Phyllopneuste sylvicola (*Lath.*), *Brehm, op. cit.* p. 426 (1831); *Macgill. Br. B.* ii. p. 364 (1839); *Doderl. Avif. Sicil.* p. 132 (1869); *Salvad. Faun. Ital. Ucc.* p. 106 (1871); *Shelley, B. Egypt*, p. 101 (1872).

Sylvicola sibilatrix (*Bechst.*), *Eyton, Cat. Brit. B.* p. 14 (1836).

Phylloscopus sibilatrix (*Bechst.*), *Blyth, Cat. B. Mus. As. Soc.* p. 184 (1849); *Schleg. Nederl. Vog.* pl. 7. fig. 6 (1861); *Newton, ed. Yarr. Br. B.* i. p. 427 (1873); *Irby, B. Gibr.* p. 88 (1875); *Danford & Harvie Brown, Ibis*, 1875, p. 308; *Blanf. East. Pers.* ii. p. 183 (1876); *Dresser, B. Eur.* pt. xlviii. (1876); *Seebohm, Ibis*, 1877, p. 88.

Phyllopseuste sibilatrix (*Bechst.*), *Cab. Mus. Hein.* i. p. 33 (1850); *Heugl. Orn. N.O.-Afr.* i. p. 298 (1869).

Spring plumage. General colour of the upper parts yellowish green, yellowest on the rump and upper tail-coverts; a distinct greenish-yellow eye-stripe extends from the base of the bill as far as the crown; the feathers before the eye and behind the eye as far as the crown olive-green; wing-coverts olive-green with paler edges; quills brown, narrowly tipped with greyish white, the outside webs edged with yellowish green, and emarginated as far as the fourth primary; the margins to the innermost secondaries are broader and paler; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs with a narrow greyish-white margin. General colour of the underparts pure white, suffused with yellow on the chin, throat, and fore neck, occasionally with a trace of yellow on the flanks and the basal part of the under tail-feathers; axillaries, under wing-coverts, and thighs yellow; inner margin of quills nearly white. Bill rather Acrocephaline for a typical *Phylloscopus*, dark brown; under mandible paler at the base. Legs, feet, and claws brown. Third primary longest; second sometimes longer, sometimes shorter than the fourth, always much longer than the fifth; bastard primary very small, the exposed part measuring 0·3 to 0·4 inch. Length of wing, male 3·1 to 2·8 inches, female 3·0 to 2·9; length of tail, male 2·25 to 2·0, female 1·95 to 1·85; length of culmen 0·48 to 0·53.

Summer plumage. Owing probably to the retiring habits of this species and the more limited range of its migration, and possibly to the firmer texture of its feathers, its plumage scarcely suffers at all from abrasion.

Autumn and *winter plumage.* Scarcely distinguishable from those of spring and summer.

The Wood-Warbler, or Yellow Willow-Warbler, breeds in Central Europe, as far north as Inverness in Scotland, Upsala in Sweden, St. Petersburg in Russia, and Bogosloffsk in the Ural. Its southern breeding-range is bounded to the west by Gibraltar, and eastwards as far south as Transylvania. It passes through Greece, Asia Minor, and Palestine on migration, and winters in North Africa, having been found to the west as far south as the Gold Coast, and to the east as far south as Abyssinia. The most easterly locality recorded of this bird is Lankoran, on the south-western shore of the Caspian.

a. Ad. st.	Europe.	
b, c. ♂ ♀ ad. sk.	Carmarthenshire.	Col. Montagu [P.].
d, e, f. ♂ ad. sk.	Avington, Hants, May 12.	R. B. Sharpe, Esq. [P.].
g, h, i, k. ♂ ad. sk.	Avington, May.	Capt. Shelley [P.].
l. Ad. sk.	Cookham, Berks, Aug. 29.	R. B. Sharpe, Esq. [P.].
m. Ad. st.	Cookham, Berks.	Mr. W. Briggs [P.].
n. ♀ ad. sk.	Park Hatch, Godalming, May 28, 1858 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
o. ♂ ad. sk.	Stockholm, May 21 (*W. Meves*).	R. B. Sharpe, Esq. [P.].
p. Ad. sk.	Mähren, N. Germany, Sept.	Henry Seebohm, Esq. [P.].
q. Ad. sk.	Sardinia, April 20 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
r. ♀ ad. sk.	Province of Constantine, Algeria, May 19, 1867 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
s, t. ♂ ♀ ad. sk.	Palestine.	Canon Tristram [C.].
u. Skeleton.	England (Warwick).	Purchased.

14. Phylloscopus trochilus.

Le Pouillot ou Chantre, *Brisson, Orn.* iii. p. 479 (1760).
Motacilla trochilus, *Linn. Syst. Nat.* i. p. 338 (1766); *Bechst. Uebers.* ii. p. 499 (1794).
Sylvia trochilus (*Linn.*), *Scop. Ann.* i. p. 160 (1769); *Lath. Ind. Orn.* ii. p. 550 (1790); *Temm. Man. d'Orn.* i. p. 224 (1820); *Boie, Isis*, 1822, p. 551; *Naum. Vög. Deutschl.* iii. p. 568 (1823); *Temm. Man. d'Orn.* iii. p. 152 (1835); *Gould, B. Eur.* ii. pl. 131. fig. 1 (1837); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 139 (1840); *Bonap. Faun. Ital. Uce.* pl. 27. fig. 2 (1841); *Werner's Atlas, Insectiv.* pl. 55 (1842); *Yarr. Brit. B.* i. p. 302 (1843); *Gray, Gen. B.* i. p. 174 (1848); *Hewitson, Eggs Brit. B.* i. p. 137, pl. 36. figs. 1 & 2 (1856); *Sundev. Sv. Fogl.* pl. 14. fig. 3 (1858); *Layard, B. S. Afr.* p. 102 (1867); *Gray, Hand-l. B.* i. p. 214. no. 3032 (1869).
Yellow Wren, *Lath. Gen. Syn.* ii. p. 512 (1783).
Motacilla fitis, *Bechst. Naturg. Deutschl.* iv. p. 678 (1795).
Sylvia fitis (*Bechst.*), *Bechst. Orn. Taschenb.* i. p. 187 (1802); *Wolf, Taschenb.* i. p. 248 (1810); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 237 (1817); *Naum. Vög. Deutschl.* iii. pl. 80. fig. 3 (1823); *Roux, Orn. Prov.* pl. 228 (1825).
Ficedula fitis (*Bechst.*), *Koch, Syst. baier. Zool.* i. p. 159 (1816).
Sylvia flaviventris, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 241 (1817).
Trochilus medius, *Forst. Synopt. Cat.* p. 54 (1817).
Phylloscopus trochilus (*Linn.*), *Boie, Isis*, 1826, p. 972; *Tristram, Ibis*, 1859, p. 418; *Schleg. Nederl. Vog.* pl. 7. fig. 6 (1861); *Newt. ed. Yarr. Br. B.* i. p. 432 (1873); *Irby, B. Gibr.* p. 89 (1875); *Danford & Harvie Brown, Ibis*, 1875, p. 308; *Blanf. East. Pers.* ii. p. 180 (1876); *Seebohm & Harvie Brown, Ibis*, 1876, p. 215; *Seebohm, Ibis*, 1877, p. 90; *Sharpe, ed. Layard's B. S. Afr.* p. 296 (1877); *Seebohm, Ibis*, 1879, p. 9; *Dresser, B. Eur.* pt. lxxiv. (1879).
Regulus trochilus (*Linn.*), *Fleming, Brit. An.* p. 72 (1828).
Phyllopneuste arborea, *Brehm, Vög. Deutschl.* p. 427 (1831).
Phyllopneuste fitis (*Bechst.*), *Brehm, op. cit.* p. 427 (1831).
Phyllopneuste acredula (*Linn.*) *apud Brehm, op. cit.* p. 428 (1831).

Phyllopneuste trochilus (*Linn.*), *Brehm, op. cit.* p. 429 (1831); *Bp. Comp. List B. Eur. & N. Amer.* p. 13 (1838); *Macgill. Brit. B.* ii. p. 371 (1839); *Bp. Consp.* i. p. 289 (1850); *Cab. Mus. Hein.* i. p. 33 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 267 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 545 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 252 (1867); *Tristram, Ibis*, 1867, p. 82; *Doderl. Avif. Sicil.* p. 131 (1869); *Fritsch, Vög. Eur.* pl. 19. fig. 8 (1871); *Sharpe, Cat. Afr. B.* p. 34 (1871); *Salvad. Faun. Ital. Ucc.* p. 106 (1871); *Gurney, in Anderss. B. Dam. Ld.* p. 101 (1872); *Shelley, B. Egypt*, p. 103 (1872); *Gould, B. Gt. Br.* ii. pl. 65 (1873); *Heugl. Orn. N.O.-Afr.* i. p. 298 (1869).

Sylvia melodia, *Blyth, Rennie's Field Nat.* i. p. 425 (1833).

Curruca viridula, *Hempr. & Ehrenb. Symb. Phys. Aves*, fol. bb (1833).

Sylvicola trochilus (*Linn.*), *Eyton, Cat. Brit. B.* p. 13 (1836).

Ficedula trochilus (*Linn.*), *Keys. u. Blas. Wirb. Eur.* p. 185 (1840); *Rüpp. Syst. Uebers.* p. 57 (1845); *Schleg. Bijdr. Dierk. Amsterd.* p. 28, pl. 12. fig. 7 (1848); *Schleg. Vog. Nederl.* pl. 73 (1854); *Linderm. Vög. Griechenl.* p. 98 (1860).

Sylvia icterina, *Vieill. apud Eversm. Add. ad Pall. Zoogr. Rosso-As.* fasc. iii. p. 14 (1842).

Sylvia tamarixis, *Crespon, Fauna Merid.* i. p. 209 (1844), *fide Degl. Orn. Eur.* i. p. 548 (1849).

Sylvia angusticauda, *Gerbe, Fauna de l'Aube*, p. 139, *fide Degl. Orn. Eur.* i. p. 549 (1849).

Phyllopneuste eversmanni, *Bp. Consp.* i. p. 289 (1850).

Silvia meisneri, *Pässler, Naum.* 1851, p. 56.

Phyllopneuste septentrionalis, *C. L. Brehm, Vogelf.* p. 232 (1855).

Phyllopneuste gracilis, *C. L. Brehm, loc. cit.* (1855).

Phyllopneuste major, *Tristram, Ann. Nat. Hist.* 1871, p. 29 (*nec Forster*).

Phyllopneuste sibilatrix (*Bechst.*) *apud Alston & Harvie Brown, Ibis*, 1873, p. 61.

Phylloscopus gaetkii, *Seebohm, Ibis*, 1877, p. 92.

Phyllopseuste trochilus (*Linn.*), *Giebel, Thes. Orn.* iii. p. 121 (1877).

Spring plumage. General colour of the upper parts olive-green, somewhat yellower on the rump, each feather having an indistinct pale tip, which forms four pale mesial lines on the crown, and gives to the rest of the upper plumage a slightly mottled appearance; a somewhat indistinct greenish-yellow eye-stripe extends from the base of the bill as far as the crown; the feathers before the eye and behind the eye as far as the crown dark olive-green; wing-coverts olive, edged with olive-green; quills brown, narrowly tipped with greyish white, the outside webs edged with yellowish green and emarginated as far as the fifth; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs with a narrow greyish-white margin. General colour of the underparts white, suffused all over with yellow, and on the breast and flanks with buff; axillaries, under wing-coverts, and thighs yellow; inner margin of quills very pale buffish white. Bill (typically Phylloscopine) narrow, depressed, and slender; upper mandible dark brown, under mandible very slightly paler. Legs, feet, and claws brown. Third and fourth primaries longest; second primary intermediate in length between the fifth and sixth; bastard primary somewhat

variable, the exposed part in males occasionally measures 0·63 inch, is usually 0·6, and in rare instances as small as 0·48; in females 0·6 is exceptionally large, 0·5 is usual, and 0·38 exceptionally small. Length of wing, male 2·83 to 2·65 inches, female 2·65 to 2·45; length of tail, male 2·3 to 2·1, female 2·1 to 1·88; length of culmen 0·4 to 0·5.

Summer plumage. Upper parts greyer, in high latitudes occasionally with all the yellow and green abraded, leaving the general colour earthy brown, the eye-stripe having faded into greyish white. The pale tips to the feathers of the crown always lost, and those to the quills generally so. Much of the yellow of the underparts also becomes abraded, and in high latitudes all except that on the axillaries and under wing-coverts, leaving the buffish yellow of the breast and flanks pale grey.

Autumn plumage similar to the spring plumage in minor details, but yellower, and without the pale tips to the feathers of the crown. Birds of the year are even more yellow than adults, the whole of the underparts being uniform buffish yellow.

Winter plumage. Similar to the summer plumage, but yellower.

The Willow-Warbler breeds throughout Northern and Central Europe, extending its range in the west of Southern Europe as far as Gibraltar, and in the east as far as Transylvania. In Asia it breeds throughout the pine-regions of Siberia as far east as the valley of the Yenesay. It winters in North, Central, and South-eastern Persia, in Greece, Asia Minor, Egypt, and North Africa; but I have not seen skins from all these localities. That it winters in South Africa, from the Transvaal to the Cape, the fine series of skins in the Museum abundantly proves.

a. Ad. sk.	Devonshire.	Col. Montagu [P.].
b–f. ♂ ad. sk.; *g–i*. ♀ ad. sk.	Avington, Hants, May 12, 13.	R. B. Sharpe, Esq. [P.].
k. ♂ ad. sk.	Avington, May 5.	Capt. Shelley [P.].
l. imm. sk.	Pagham, Sussex, Sept. 3.	R. B Sharpe, Esq. [P.].
m. imm. sk.	Cookham, Berks, Aug. 28.	R. B. Sharpe, Esq. [P.].
n. Ad. st.	Cookham.	Mr. W. Briggs [P.].
o. Ad. st.	Saffron Walden, Essex.	J. Clark, Esq. [C.].
p, *q*. Ad.; *r*, *s*. juv. st.	Cambridgeshire.	Mr. J. Baker [C.].
t. juv. sk.	Belfast, Ireland.	M. Beresford, Esq. [P.].
u, *v*. Ad. sk.	Antwerp, Belgium.	R. B. Sharpe, Esq. [P.].
w. Ad. st.	France.	R. B. Sharpe, Esq. [P.].
x, *y*. ♂ ♀ ad. sk.	S. Norway, July 1866 (*F. G.*).	F. Godman & O. Salvin, Esqrs. [P.].
z. ♂ juv. sk.	Heligoland, Oct. 2.	H. Seebohm, Esq. [P.].
a'. ♀ ad. sk.	Ust Zylma, Petchora, June 3, 1875.	H. Seebohm, Esq. [P.].
b'. ♀ ad. sk.	Siberia (Yenesay, lat. 66½°), June 4.	H. Seebohm, Esq. [P.].
c'. ♂ ad. sk.	Valley of the Obb, Aug. 15.	Dr. O. Finsch [C.].
d'. ♂ ad. sk.	Valley of the Obb, Sept. 6.	Dr. O. Finsch [C.].
e'. ♂ ad. sk.	Sardinia, Villacidio, April 18 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
f', *g'*. ♂ ♀ ad. sk.	Constantinople, Oct., Nov. (*Robson*).	R. B. Sharpe, Esq. [P.].
h', *i'*. Ad sk.	Tangier (*Oleese*).	Col. Irby [P.].

k', *l'*. ♂ ad. sk.	Ortakeuy, Turkey, Aug., Oct. (*Robson*).	F. Godman & O. Salvin, Esqrs. [P.].
m'. Ad. sk.	White Nile (*Brun-Rollet*)	R. B. Sharpe, Esq.
n'. ♀ ad. sk.; *o'*. ♂ ad. sk.	Transvaal, Potchefstroom, Mar. 14 (*W. Lucas*).	R. B. Sharpe, Esq. [P.].
p', *q'*. Ad. sk.	Graham's Town, Feb. (*T. Atmore*).	R. B. Sharpe, Esq.
r'. Ad. sk.	Zaarberg (*E. L. Layard*).	R. B. Sharpe, Esq.
s'. ♂. ad sk.	Knysna, Mar. 13 (*C. J. Andersson*).	R. B. Sharpe, Esq.
t'. Ad. sk.	Cape Town (*E. L. Layard*).	R. B. Sharpe, Esq.
u'. ♀ ad. sk.	Namaqua Land.	Sir A. Smith [C.].
v'. ♂, *w'*. ♀ juv. sk.	Damara Land, Elephant Vley, Oct. 12, 26 (*C. J. Andersson*).	R. B. Sharpe, Esq. [P.].
x'. ♂, *y'*. ♀, *z'*. Ad. sk.	Damara Land, Elephant Vley, Oct. 12, Nov. 4 (*C. J. Andersson*).	R. B. Sharpe, Esq. [P.].
a''. ♂, *b''*. Ad. sk.	Damara Ld. (*C.J. Andersson*).	R. B. Sharpe, Esq.
c''. ♂, *d''*. ♀ ad. sk.	Ondonga, Dec. 28, Jan. 22 (*C. J. Andersson*).	R. B. Sharpe, Esq.
e''. Ad. sk.	Columbo, R. Quanza, Nov.	J. J. Monteiro, Esq. [C.].
f''. Ad. sk.	Landana, Congo river.	MM. Lucan & Petit [C.].
g''. Ad. sk.	Cape Verd, Senegal.	M. Leon Laglaise [C.].
h''. Ad. sk.	Gambia river.	R. B. Sharpe, Esq.
i'', *k''*. Skeleton.	England.	Purchased.
l''. Skull.	Berlin.	Dr. A. Günther.

15. Phylloscopus bonellii.

Sylvia bonelli, *Vieill. N. Dict. d'Hist. Nat.* xxviii. p. 91 (1819); *Roux, Orn. Prov.* pl. 226 (1825); *Bonap. Faun. Ital. Uce.* pl. 27. fig. 4 (1832 to 1841); *Gray, Gen. B.* i. p. 174 (1848); *Gray, Hand-l. B.* i. p. 214. no. 3033 (1869).

Sylvia nattereri, *Temm. Man. d'Orn.* i. p. 227 (1820); *Temm. Pl. Col.* iii. pl. 24. fig. 3 (1824); *Gould, B. Eur.* ii. pl. 134 (1837); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 139 (1840); *Werner, Atlas, Insectivores*, pl. 57 (1842).

Phyllopneuste montana, *Brehm, Vög. Deutschl.* p. 429 (1831).

Sylvia prasinopyga, *Licht., fide Gloger, Handb. Vög. Eur.* i. p. 217 (1834).

Sylvia albicans, *Baldst., fide Gloger, op. cit.* i. p. 217 (1834).

Phyllopneuste bonelli (*Vieill.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 13 (1838); *id. Consp.* i. p. 289 (1850); *Hartl. Orn. W.-Afr.* p. 61 (1857); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 265 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 554 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 255 (1867); *Tristram, Ibis*, 1867, p. 83; *Doderl. Avif. Sicil.* p. 133 (1869); *Fritsch, Vög. Eur.* pl. 19. fig. 9 (1871); *Salvad. Faun. Ital. Uce.* p. 108 (1871); *Shelley, B. Egypt*, p. 101 (1872).

Ficedula bonelli (*Vieill.*), *Keys. u. Blas. Wirb. Eur.* p. 185 (1840); *Schleg. Bijdr. Dierk. Amsterd.* p. 28, pl. 12. fig. 6 (1848).

Phylloscopus nattereri (*Temm.*), *Blyth, Cat. B.M. As. Soc.* p. 184 (1849).

Phyllopseuste bonellii (*Vieill.*), *Cab. Mus. Hein.* i. p. 33 (1850); *Heugl. Orn. N.O.-Afr.* i. p. 300 (1869).

Phyllopneuste alpestris, *Brehm, Vogelf.* p. 232 (1855).

Phyllopneuste orientalis, *Brehm, op. cit.* p. 232 (1855).

Sylvia (Phyllopneuste) montana (*Brehm*), *Naum. Vög. Deutschl.* xiii. p. 417, pl. 369. fig. 4 (1860).
Phylloscopus bonellii (*Vieill.*), *Tristram, Ibis*, 1859, p. 418; *Irby, B. Gibr.* p. 89 (1875); *Dresser, B. Eur.* pt. xlviii. (1876); *Seebohm, Ibis*, 1877, p. 94.

Spring plumage. General colour of the upper parts buffish brown, suffused with yellow on the rump and upper tail-coverts. An indistinct pale greyish-white eye-stripe extends from the base of the bill as far as the crown; the feathers before the eye and behind the eye as far as the crown brown; lesser wing-coverts buffish brown, suffused with yellow; greater and median wing-coverts buffish brown with paler edges; quills brown, narrowly tipped with greyish white; the outside webs edged with greenish yellow and emarginated as far as the fifth; the margins to the innermost secondaries are broader and paler; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs with a narrow greyish-white margin. General colour of the underparts pure white, suffused with buffish yellow on the chin and throat, and with pale yellow on the breast and flanks; axillaries, under wing-coverts, and thighs yellow; inner margin of quills greyish white. Bill Phylloscopine; upper mandible dark brown, under mandible pale brown, darker at the tip. Legs, feet, and claws light brown. Third and fourth primaries longest; second primary sometimes intermediate in length between the fifth and sixth, sometimes between the sixth and seventh; exposed part of the bastard primary measures 0·5 to 0·6 inch. Length of wing, male 2·75 to 2·55 inches, female 2·5 to 2·3; length of tail, male 2·2 to 2·05, female 2·0 to 1·8; length of culmen 0·46 to 0·48.

Summer plumage. Some of the yellow on the rump and frequently all the yellow on the upper tail-coverts, is lost by abrasion, the pale tips to the quills generally disappear, and the pale edges to the innermost secondaries become narrower.

Autumn plumage unknown.

Bonelli's Willow-Warbler breeds on both shores of the Mediterranean, extending northwards into Northern France, and eastwards into Palestine; winters in Senegal, the oases of North Africa, and Nubia.

a. ♂, *b*. ♀ ad. sk.	Mt. Tabor, Palestine.	Canon Tristram [C.].
c. Ad. sk.	Europe.	Purchased.
d. Ad. st.	Piedmont.	
e. Ad. st.	South France.	R. B. Sharpe, Esq. [P.].
f. Ad. sk.	Near Gibraltar.	Col. Irby [P.].
g. Ad. sk.	Tangiers (*Olcese*).	Col. Irby [P.].

16. Phylloscopus rufus.

Phylloscopus rufus (*Bechst.*)*.
Yellow Wren, var. D, *Lath. Gen. Syn.* ii. p. 514 (1783).

* I cannot see the slightest advantage to be gained by rejecting Bechstein's name for the Chiffchaff on the ground that Boddaert's *Sylvia rufa* may be the

Sylvia hippolais (*Linn.*) *apud Lath. Gen. Syn. Suppl.* i. p. 87 (1787); *apud Turton, Brit. Faun.* p. 44 (1807), *apud Leach, Syst. Cat. Mamm. &c. Brit. Mus.* p. 24 (1816), *apud Gould, B. Eur.* ii. pl. 131. fig. 2 (1837), *apud Yarr. Brit. B.* i. p. 307 (1843).

Motacilla rufa *et* lotharingica, *Linn., fide Bechst. Naturg. Deutschl.* iv. p. 682 (1795).

Sylvia rufa, *Bechst. Orn. Taschenb.* i. p. 188 (1802); *Wolf, Taschenb.* i. p. 249 (1810); *Temm. Man. d'Orn.* i. p. 225 (1820); *Boie, Isis*, 1822, p. 552; *Naum. Vög. Deutschl.* iii. p. 581, pl. 80. fig. 4 (1823); *Temm. Man. d'Orn.* iii. p. 154 (1835); *Bonap. Faun. Ital. Ucc.* pl. 27. fig. 3 (1841); *Werner's Atlas, Insectivores*, pl. 56 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Hewitson, Eggs Brit. B.* i. p. 139, pl. 36. fig. 4; *Gray, Hand-l. B.* i. p. 215. no. 3034 (1869).

Motacilla hippolais, *Linn. apud Turton, Linn. Syst. Nat.* i. p. 587 (1806).

Ficedula rufa (*Bechst.*), *Koch, Syst. baier. Zool.* i. p. 160 (1816); *Keys. u. Blas. Wirb. Eur.* p. 185 (1840); *Schleg. Bijdr. Dierk. Amsterd.* fol. i. p. 28, pl. 12. fig. 8 (1848); *Schleg. Vog. Nederl.* pl. 74 (1854); *Linderm. Vög. Griechenl.* p. 98 (1860).

Sylvia collybita, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 235 (1817); *Roux, Orn. Prov.* pl. 223 (1825).

Trochilus minor, *Forster, Synopt. Cat.* p. 54 (1817).

Sylvia abietina, *Nilss. K. Vet.-Ak. Handl.* 1819, p. 115; *Nordm. Demid. Voy. Russ. mérid.* p. 140 (1840); *Sund. Sv. Fogl.* pl. 14. fig. 4 (1858).

Regulus hippolais (*Linn.*) *apud Fleming, Brit. An.* p. 72 (1828).

Phylloscopus rufus (*Bechst.*), *Kaup, Natürl. Syst.* p. 94 (1829); *Blyth, Cat. B. Mus. As. Soc.* p. 185 (1849); *Tristram, Ibis*, 1859, p. 418; *Schleg. Nederl. Vog.* pl. 7. fig. 8 (1861).

Phyllopneuste sylvestris, *Brehm, Vög. Deutschl.* p. 431 (1831).

Phyllopneuste solitaria, *Brehm, op. cit.* p. 432 (1831).

Phyllopneuste pinetorum, *Brehm, op. cit.* p. 432 (1831).

Phyllopneuste rufa (*Bechst.*), *Brehm, op. cit.* p. 433 (1831); *Bp. Comp. List B. Eur. & N. Amer.* p. 13 (1838); *Cab. Mus. Hein.* i. p. 33 (1850); *Bp. Consp.* i. p. 289 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 268 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 546 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 253 (1867); *Tristram, Ibis*, 1867, p. 83; *Doderl. Avif. Sicil.* p. 133 (1869); *Howard Saunders, Ibis*, 1871, p. 213; *Fritsch, Vög. Eur.* pl. 19. fig. 15 (1871); *Salvad. Faun. Ital. Ucc.* p. 107 (1871); *Shelley, B. Egypt*, p. 102 (1872); *Godman, Ibis*, 1872, p. 174; *Gould, B. Gt. Br.* pl. 66 (1873); *Heugl. Orn. N.O.-Afr.* i. p. 299 (1869).

Trochilus rufa (*Bechst.*), *Rennie, Field Nat.* i. p. 52 (1833).

Sylvia loquax, *Herbert, White's N. H. of Selb.* p. 55, note (1833).

Sylvicola rufa (*Bechst.*), *Eyton, Cat. Brit. B.* p. 14 (1836).

Sylvia brevirostris, *Strickl. P. Z. S.* 1836, p. 98; *Gray, Gen. B.* i. p. 174 (1848); *Gray, Hand-l. B.* i. p. 215. no. 3038 (1869).

Phyllopneuste hippolais (*Linn.*) *apud Macgill. Br. B.* ii. p. 379 (1839).

Phyllopneuste brevirostris (*Strickl.*), *Bp. Consp.* i. p. 289 (1850).

Sylvia (Phyllopneuste) sylvestris (*Meisner*), *fide Naum. Vög. Deutschl.* xiii. p. 429, pl. 369. fig. 1 (1860).

Whitethroat. It is obvious that Boddaert intended to designate a bird other than the Whitethroat by this name; and under no circumstance can the name of *Phylloscopus rufa*, Bechst., be confounded with any other bird than the one to which he applied it. (*Conf.* Seebohm, 'Ibis,' 1879, p. 432.)

Sylvia (Phyllopneuste) rufa (*Bechst.*), *Gray, Cat. Brit. B.* p. 50 (1863).
Phylloscopus habessinicus, *Blanf. Ann. Nat. Hist.* 1869, p. 329.
Phylloscopus brehmi, *Homeyer, Erinn. Vers. deutschl. Orn.* 1870, p. 48.
Phylloscopus abyssinicus, *Blanf. Geol. & Zool. Abyss.* p. 378, pl. 111. fig. 2 (1870).
Phyllopneuste brehmi (*Homeyer*), *Dresser, P. Z. S.* 1872, p. 25.
Phyllopneuste tristrami, *Brooks, fide Dresser, P. Z. S.* 1872, p. 25.
Phylloscopus collybita (*Vieill.*), *Newt. ed. Yarr. Brit. B.* i. p. 437 (1873); *Irby, B. Gibr.* p. 89 (1875); *Danford & Harvie Brown, Ibis*, 1875, p. 308; *Blanf. East. Pers.* ii. p. 181 (1876); *Seebohm, Ibis*, 1877, p. 95; *Dresser, B. Eur.* pt. lxxiv. (1879).
Phyllopseuste rufa (*Bechst.*), *Gieb. Thes. Orn.* iii. p. 120 (1877).

Spring plumage. General colour of the upper parts olive-green, slightly yellower on the rump; eye-stripe somewhat ill-defined, greyish white, with a shade of yellow, and extending only a short distance behind the eye; lores and the feathers behind the eye olive; wing-coverts and quills brown, edged on the outside webs with olive-green, and emarginated as far as the sixth; quills narrowly tipped with white; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs with a narrow greyish-white margin. General colour of the underparts white, shading into grey on the breast and flanks, and more or less suffused all over with yellow; axillaries, under wing-coverts, and thighs yellow; inner margin of quills very pale buffish white. Bill Phylloscopine; upper mandible dark brown, under mandible scarcely paler. Legs, feet, and claws dark brown, approaching black. Third and fourth primaries longest, second primary sometimes intermediate in length between the sixth and seventh, usually between the seventh and eighth, and in rare instances between the eighth and ninth; the exposed part of the bastard primary measures 0·5 to 0·65 inch. Length of wing, male 2·55 to 2·25 inches, female 2·3 to 1·95; length of tail, male 2·2 to 2·0, female 2·0 to 1·7; length of culmen 0·4 to 0·45.

Summer plumage. This species suffers considerably from abrasion during the perils of migration. The upper parts fade into olive-grey, the eye-stripe and underparts lose some of their yellow, and the pale tips to the quills disappear.

Autumn plumage. After the autumn moult the whole of the plumage becomes suffused with buffish yellow, which is almost pure pale buff on the eye-stripe, breast, flanks, and under tail-coverts.

Winter plumage. The buffish yellow pervading the whole of the autumn plumage is never entirely lost by abrasion in winter.

The Chiffchaff, or Chiffchaff Willow-Warbler, breeds in the temperate regions of Europe almost up to the Arctic Circle, and winters on both shores of the Mediterranean, the southern limit of its winter range being Abyssinia.

a. Ad. sk.	Devonshire.	Col. Montagu [P.].
b. Ad. sk.	Wiltshire.	Col. Montagu [P.].
c. ♂ ad. sk.	Avington, Hants, May 16.	Capt. Shelley [P.].

d, *e*. ♂ ♀ ad. sk.	Avington, May 12.	R. B. Sharpe, Esq. [P.].
f, *g*. Ad. st.	Epping.	Henry Doubleday, Esq. [P.].
h. Ad. st.	Saffron Walden, Essex.	J. Clark, Esq. [P.].
i. ♂ ad. sk.	Cambridgeshire, April 14, 1856 (*O. S.*).	F. Godman & O. Salvin, Esqrs. [P.].
k. Ad. sk.	North Bothnia.	Purchased.
l. Ad. st.	Heligoland.	Henry Seebohm, Esq. [P.].
m. ♂ ad. sk.	Antwerp.	R. B. Sharpe, Esq. [P.].
n, *o*. Ad. st.	France.	R. B. Sharpe, Esq. [P.].
p. Ad. sk.	Sardinia, March 8 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
q, *r*. Ad. sk.	Near Gibraltar.	Col. Irby [P.].
s. Ad. sk.	Marocco (*Olcese*).	R. B. Sharpe, Esq. [P.].
t. ♂ ad. sk.	El Djen, Tunis, March 1, 1857 (*O. S.*).	F. Godman & O. Salvin, Esqrs. [P.].
u, *v*. ♂ ad. sk.	Orotava, Teneriffe, April 1871 (*F. G.*).	F. Godman & O. Salvin, Esqrs. [P.].
w–*o'*. ♂ ad. sk.	Constantinople, Oct. 20–24 (*Robson*).	R. B. Sharpe, Esq. [P.].
♀ ad. sk.	Constantinople, Nov. 1 (*Robson*).	R. B. Sharpe, Esq. [P.].
e'. ♂ ad. sk.	Asia Minor, Oct. 28, 1866 (*Robson*).	F. Godman & O. Salvin, Esqrs. [P.].
f'. ♂ ad. sk.	Jericho, Jan. 4, 1864 (*Tristram*).	F. Godman & O. Salvin, Esqrs. [P.].
g'. ♀ ad. sk.	Mount Carmel, March 24, 1864 (*Tristram*).	F. Godman & O. Salvin, Esqrs. [P.].
h', *i'*. ♂ ad. sk.	Palestine.	Canon Tristram [C.].
k'–*n'*. ♀ ad. sk.	Jericho.	Canon Tristram [C.].
o'. Ad. sk.	Ras Masandani, Arabia, Dec. 9.	W. T. Blanford, Esq. [C.].
p', *q'*, *r'*. ♂ ad. sk.	Cairo.	Dr. L. Adams [P.].
s', *t'*, *u'*. ♂ ad. sk.	Thebes.	Dr. L. Adams [P.].
v'. ♂ ad. sk.	Senafé, Abyssinia, 3000 ft.	W. T. Blanford, Esq. [C.].
w'. ♀ ad. sk.	Senafé, Abyssinia, 7500 ft.	W. T. Blanford, Esq. [C.]. (Type of *Phylloscopus habessinicus*, Blanf.)
x'. Skeleton.	England (Warwick).	Purchased.

17. Phylloscopus tristis.

Motacilla acredula (*Linn.*) *apud Pall. Zoog. Rosso-As.* i. p. 496 (1811).
Sylvia trochilus (*Linn.*) ?, *apud Jerd. Madras Journ.* xi. p. 6 (1840).
Phylloscopus tristis, *Blyth, J. A. S. Beng.* xii. p. 966 (1843); *id. J. A. S. Beng.* xiv. p. 591 (1845); *id. Cat. B. Mus. As. Soc.* p. 185 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 336 (1854); *Jerdon, B. India*, ii. p. 190 (1863); *Hume & Henders. Lahore to Yark.* p. 219 (1873); *Dresser, B. Eur.* pt. lxvi. (1875); *Blanf. East. Pers.* ii. p. 180 (1876); *Seebohm & Harvie Brown, Ibis*, 1876, p. 217; *Scully, Stray Feath.* iv. p. 148 (1876); *Seebohm, Ibis*, 1877, p. 97; *id. Ibis*, 1879, p. 10.
Phyllopneuste affinis, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 57. no. 838, *undè Hodgs. Gray's Zool. Misc.* p. 82 (1844, *nec Tickell*); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 65 (1846).

Regulus tristis (*Blyth*), *Gray, Gen. B.* i. p. 175 (1848).
Abrornis tristis (*Blyth*), *Bp. Consp.* i. p. 290 (1850).
Phyllopneuste tristis (*Blyth*), *Gould, B. of Asia*, pt. xvii. (1865); *Tacz. Bull. Soc. Zool. Fr.* 1876, p. 140.
Phylloscopus brevirostris (*Strickl.*) *apud Brooks, Ibis*, 1869, p. 236.
Sylvia tristis (*Blyth*), *Gray, Hand-l. B.* i. p. 215. no. 3048 (1869).
Sylvia affinis (*Hodgs.*), *Gray, Hand-l. B.* i. p. 217. no. 3084 (1869).
Ficedula fulvescens, *Severtz. Turkest. Jevotn.* pp. 65, 126 (1873, *see Ibis*, 1876, p. 82).
Phyllopseustes tristis (*Blyth*), *Meves, Journ. Orn.* 1875, p. 430.
Phylloscopus neglectus, *Hume apud Seebohm & Harvie Brown, Ibis*, 1876, p. 218.
Phylloscopus brehmi, *Homeyer apud Blanf. East. Persia*, ii. p. 182 (1876).

Spring plumage. General colour of the upper parts earthy brown, very slightly suffused with yellowish green on the rump; eye-stripe buffish white, narrow, tolerably well-defined, scarcely reaching to the nape; lores and the feathers behind the eye dark earthy brown; wing-coverts brown, with slightly paler margins; quills brown, showing traces of yellowish green on the outside edges, and emarginated as far as the sixth quill; tail-feathers brown, showing traces of yellowish green on the outside webs, and narrowly margined with greyish white on the inside webs. General colour of the underparts nearly white, shading into pale buff on the breast, flanks, and thighs; axillaries and under wing-coverts yellow; inner margin of quills very pale buffish white. Bill Phylloscopine, both mandibles dark brown. Legs, feet, and claws nearly black. Third and fourth primaries longest; second primary equal to the seventh, or slightly shorter; the exposed part of the bastard primary 0·5 to 0·65 inch. Length of wing, male 2·58 to 2·33 inches, female 2·25 to 2·1; length of tail, male 2·3 to 2·2, female 2·0 to 1·9; length of culmen 0·45 to 0·48.

Summer plumage. The slight traces of yellowish green on the outside web of the wing- and tail-feathers are soon lost by abrasion. The underparts and the eye-stripe lose some of their buff and become whiter, and, in very rare instances, the yellow on the axillaries and under wing-coverts almost disappears.

Autumn plumage. Very similar to the spring plumage, but with the buff on the eye-stripe and underparts more developed.

Winter plumage. The abrasion which takes place during winter is somewhat less than is usually the case in summer.

The Siberian Willow-Warbler, or Siberian Chiffchaff, breeds in the valleys of the Petchora, the Obb, and the Yenesay, extending northwards beyond the limit of forest-growth, and southwards as far as Perm in the west and Yenasaisk in the east. It passes across the Kirghiz steppes and Turkestan on migration, and winters in Baluchistan and the plains of India. It also breeds abundantly in Cashmere and in the mountains near Lake Baical.

a, b, c. ♂ ad. sk.	Baluchistan, March 23 to April 7.	W. T. Blanford, Esq. [C.].
d, e, f. Ad. sk.	Afghanistan (*Griffith*).	India Museum.
g. Ad. sk.	Peshawur.	India Museum.

h. Ad. sk.	N.W. India (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
i–n. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
o. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Phyllopneuste affinis*, Hodgson.)
p. Ad. st.	India.	J. Gould, Esq. [P.].
q. Ad. sk.	Madras.	
r. Ad. sk.	Bengal.	India Museum.
s. ♂ ad. sk.	Yenesay, Siberia, lat. 66½°, June 20.	H. Seebohm, Esq. [C.].
t. ♂, *u.* ♀ ad. sk.	Obb, Siberia, July 7 & 10.	Dr. O. Finsch [C.].
v. ♂ ad. sk.	Alexievka, Petchora, June 22.	Henry Seebohm, Esq. [P.].
w, x. Ad. sk.	Cashmere (*Dr. Bellew*).	India Museum.

18. **Phylloscopus affinis.**

Motacilla affinis*, *Tickell, J. A. S. Beng.* ii. p. 576 (1833).
Phylloscopus lugubris, juv. (*Blyth*), *Blyth, J. A. S. Beng.* xii. p. 968 (1843).
Abrornis zanthogaster, *Hodgs. MS. Drawings* (*in the Brit. Mus.*) *of Birds of Nepal, Passeres*, pl. 65. no. 854, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 854 (1844); *Gray, Cat. Mamm. &c. Nepal pres. Hodgs.* p. 66 (1846).
Phylloscopus affinis (*Tickell*), *Blyth, J. A. S. Beng.* xvi. p. 442 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 185 (1849); *Jerdon, B. India*, ii. p. 194 (1863); *Pelzeln, Ibis*, 1868, p. 308; *Blanf. J. A. S. Beng.* xli. pt. 2, p. 54 (1872); *Brooks, Ibis*, 1872, p. 31; *id. J. A. S. Beng.* xli. pt. 2, p. 81 (1872); *Godwin-Austen, J. A. S. Beng.* xlv. pt. 2, p. 80 (1876); *Seebohm, Ibis*, 1877, p. 100; *Hume & Davison, Stray Feath.* vi. p. 356 (1878).
Regulus flaveolus (*Blyth*), *fide Gray, Gen. B.* i. p. 175 (1848).
Regulus affinis (*Tickell*), *Gray, Gen. B.* i. p. 175 (1848).
Abrornis affinis (*Tickell*), *Bp. Consp.* i. p. 290 (1850).
Abrornis flaveolus (*Blyth*), *fide Bp. Consp.* i. p. 290 (1850).
Phylloscopus lugubris (*Blyth*), *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 337 (1854).
Sylvia affinis (*Tickell*), *Gray, Hand-l. B.* i. p. 215. no. 3052 (1869).
Sylvia flaveola, *Blyth, fide Gray, Hand-l. B.* i. p. 217. no. 3073 (1869).
Sylvia xanthogaster (*Hodgs.*), *Gray, Hand-l. B.* i. p. 217. no. 3079 (1869).
Abrornis acanthizoides, *Verr. N. Arch. Mus., Bull.* vi. p. 37 (1870).
Abrornis affinis (*Hodgs.*), *Prjev. Rowley's Orn. Misc.* ii. p. 172 (1877); *David et Oust. Ois. Chine*, p. 273 (1877).
Phyllopseuste affinis (*Tickell*), *Giebel, Thes. Orn.* iii. p. 117 (1877).
Oreopneuste acanthizoides (*Verr.*), *David et Oust. Ois. Chine*, p. 266 (1877).

This species appears to be subject to little or no seasonal change of plumage; nor does the slight abrasion of the feathers which takes place in summer make any appreciable change in the appearance of the bird.

The general colour of the upper parts is olive-brown, very slightly darker on the head; eye-stripe deep yellow, paler at the nape; lores and the feathers behind the eye olive-brown; wings

* No doubt a typical error for *affinis*.

and tail-feathers brown, the outside webs edged with olive-brown, the former emarginated as far as the sixth quill. General colour of the underparts deep yellow, shaded into buffish yellow on the breast and flanks; axillaries and under wing-coverts deep yellow; inner margin of quills buffish white. Bill Phylloscopine; upper mandible dark brown, under mandible pale brown. Legs, feet, and claws brown. Third, fourth, and fifth primaries longest; second primary equal to the ninth or tenth; bastard primary about half the length of the second primary, the exposed part measuring 0·7 to 0·8 inch. Length of wing, male 2·4 to 2·2 inches, female 2·2 to 2·0; length of tail, male 2·15 to 2·0, female 1·95 to 1·8; length of culmen 0·43 to 0·46.

Tickell's Willow-Warbler breeds in the Himalayas from Cashmere to Burma, extending its range north-eastwards through Sechuen to Kansu, and wintering in the plains of India.

a. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Abrornis zanthogaster*, Hodgs.)
b–g. Ad. sk.	Nepal (*Hodgson*).	India Museum.
h, *i*, *k*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
l–o. Ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
p. Ad. sk.	Madras.	Dr. Jerdon [P.].
q. Ad. sk.	India.	(Type of *Phyllopneuste flaveolus*, Gray.)
r. Ad. sk.	Garo Hills.	Col. Godwin-Austen [P.].

19. Phylloscopus tytleri.

Phylloscopus tytleri, *Brooks*, *Ibis*, 1872, p. 23; *id. J. A. S. Beng.* xli. pt. 2, p. 79 (1872); *Hume*, *Nest & Eggs Ind. B.* p. 362 (1873); *id. Str. F.* iii. p. 279 (1875); *Seebohm*, *Ibis*, 1877, p. 101.

Spring plumage unknown.

Summer plumage. General colour of the upper parts olive-brown, shading into greenish olive on the rump; eye-stripe greyish white, narrow, not very well defined, and scarcely extending to the nape; lores and the feathers behind the eye brown; quills and tail-feathers brown, edged on their outside webs with greenish olive, the former emarginated as far as the sixth quill. General colour of the underparts yellowish white, greyer on the breast, flanks, and thighs; axillaries and under wing-coverts yellow; inner margin of quills very pale brown. Bill very long and slender, dark brown, a trifle paler at the base of the under mandible. Legs, feet, and claws dark brown. Third, fourth, and fifth primaries longest; second primary intermediate in length between the eighth and ninth; bastard primary less than half the length of the second, the exposed portion measuring 0·55 to 0·68 inch. Length of wing, male 2·43 to 2·35 inches, female 2·3 to 2·2; length of tail, male 1·85 to 1·7, female 1·7 to 1·65; length of culmen 0·5.

Autumn plumage. After the autumn moult the underparts are much buffer.

Winter plumage. Showing the usual effects of abrasion.

J.G. Keulemans del. Mintern Bros imp.

Fig. 1. *Phylloscopus humii.*
Fig. 2. ——— *subviridis.*

Tytler's Willow-Warbler breeds in Cashmere, and winters in the plains of India.

The British Museum does not possess an example of this rare species. I have a skin in my collection obtained by Capt. Biddulph in Cashmere.

20. **Phylloscopus humii.** (Plate IV. fig. 1.)

Abrornis tenuiceps, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 57. fig. 8, no. 855, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 856 (1844, *descr. nulla*); *Gray, Cat. M. & Birds Nepal pres. Hodgs.* p. 66 (1846, *descr. nulla*); *Hodgs. J. A. S. B.* xxiv. p. 575 (1856, *descr. nulla*).

Reguloides superciliosus (*Gmel.*), *Brooks, Ibis*, 1869, p. 236; *id. Ibis*, 1872, p. 24.

Reguloides humii, *Brooks, Str. F.* vii. p. 131 (1878).

Spring plumage. General colour of the upper parts olive, browner on the head and greener on the rump; a well-defined buff eye-stripe extends from the base of the bill to the nape; sometimes, but very rarely, slight traces of a pale mesial line are visible; lores and the space behind the eye brownish olive. Wing-coverts brown, the lesser wing-coverts with broad olive-green margins; the median wing-coverts with obscure pale tips; the greater wing-coverts with broad, well-defined buffish-yellow tips, forming a conspicuous pale bar across each wing; quills brown, all the secondaries and four or five of the primaries narrowly tipped with greyish white; outside webs of the quills edged with yellowish green and emarginated as far as the sixth; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs with a narrow greyish-white margin. General colour of the underparts greenish yellow, nearly white on the throat, and shading into buff on the flanks; inner margin of quills nearly white. Bill slender, Phylloscopine, dark brown, with the under mandible paler at the base. Legs, feet, and claws dark brown. Fourth primary slightly the longest; second primary intermediate in length between the eighth and ninth, occasionally between the seventh and eighth, and occasionally between the ninth and tenth; the exposed part of the bastard primary measures 0·45 to 0·55 inch. Length of wing 2·32 to 2·01 inches, tail 1·8 to 1·5, culmen 0·4 to 0·45.

Summer plumage. Considerably abraded, but not nearly so much so as is the case with *P. superciliosus*.

Autumn plumage. Similar to the spring plumage, but more brilliant; the buff of the eye-stripe is somewhat deeper in shade.

Hume's Barred Willow-Warbler breeds in the Himalayas, and winters in the valley of the Ganges.

a. Ad. sk.	Afghanistan (*Griffith*).	India Museum.
b, c. Ad. sk.	N.W. India (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
d. Ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
e. Ad. sk.	Nepal (*B. H. Hodgson*).	India Museum.
f, g. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].

(Types of *Abrornis tenuiceps*, Hodgson.)

h, *i*. Ad. sk.	Muddapur (*W. E. Brooks*).	H. Seebohm, Esq. [P.].
k. Ad. st.	Behar.	B. H. Hodgson, Esq. [P.].
l, *m*. Ad. st.	Calcutta.	E. Blyth, Esq. [P.].
n. Ad. sk.	Cashmere (*Dr. Bellew*).	India Museum.

21. Phylloscopus superciliosus.

Yellow-browed Warbler, *Lath. Gen. Syn.* ii. p. 459 (1783).
Motacilla superciliosa, *Gmel. Syst. Nat.* i. p. 975 (1788).
Sylvia superciliosa (*Gmel.*), *Lath. Ind. Orn.* ii. p. 526 (1790); *Sund. Sv. Fogl.* pl. 68. fig. 1 (1858); *Gray, Hand-l. B.* i. p. 216. no. 3067 (1869).
Regulus modestus, *Gould, Hancock, Ann. Nat. Hist.* ii. p. 310 (1839); *Yarr. Brit. B.* i. p. 316 (1843); *Cabanis, Naum.* ii. pt. 1, p. 5 (1852); *Gaetke, Journ. Orn.* 1853, p. 91; *Naum. Vög. Deutsch.* xiii. pl. 378. figs. 2 & 3 (1860); *Tristram, Ibis*, 1864, p. 230.
Regulus inornatus, *Blyth, J. A. S. Beng.* xi. p. 191 (1842).
Phylloscopus modestus (*Gould*), *Blyth, J. A. S. Beng.* xii. p. 963 (1843).
Phyllopneuste modesta (*Gould*), *Blyth, Ann. Nat. Hist.* xii. p. 98 (1843); *Blyth, Ann. Nat. Hist.* xiii. p. 116 (1844).
Reguloides modestus (*Gould*), *Blyth, J. A. S. Beng.* xvi. p. 442 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 184 (1849, *partim*).
Sylvia (Phyllopneuste) proregulus (*Pall.*), *Midd. Sib. Reise*, p. 183 (1853, *partim*).
Phyllobasileus superciliosus (*Gmel.*), *Cabanis, Journ. Orn.* 1853, p. 81; *Fritsch, Vög. Eur.* pl. 19. figs. 3 & 4 (1871).
Reguloides proregulus (*Pall.*), *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 342 (1854); *Swinhoe, Ibis*, 1863, p. 307, *et ante*; *Jerdon, B. Ind.* ii. p. 197 (1863); *Bp. Consp.* i. p. 291 (1850).
Ficedula proregulus (*Pall.*), *Schlegel, Vog. Nederl.* pp. 130, 241 (1854).
Phyllopneuste proregulus (*Pall.*), *Blasius, Naum.* viii. p. 311 (1858); *Blasius, Ibis*, 1862, p. 66.
Sylvia bifasciata, *Gaetke, Naum.* viii. p. 419 (1858).
Phyllopneuste (Phyllobasileus) superciliosa (*Gmel.*), *Schrenck, Reis. Forsch. Amur-Lande*, i. p. 363 (1860).
Sylvia (Phyllopneuste) superciliosa (*Gmel.*), *Naum. Vög. Deutschl.* xiii. pt. 2, p. 74 (1860); *Radde, Reis. Sibir. Vög.* p. 264 (1863, *partim*).
Reguloides superciliosus (*Gmel.*), *Blyth, Ibis*, 1862, p. 386; *Swinhoe, Ibis*, 1863, p. 307, *et subseq.*; *Tristram, Ibis*, 1867, p. 83; *Gould, Ibis*, 1869, p. 128; *Swinhoe, P. Z. S.* 1871, p. 357; *Harting, Handb. Br. B.* p. 107 (1872); *Gould, B. Gt. B.* ii. pl. 68 (1873); *Hume, Nests & Eggs Ind. B.* p. 364 (1873); *Blyth & Walden, B. Burm.* p. 106 (1875); *Prjev. Rowley's Orn. Misc.* ii. p. 172 (1877); *David & Oust. Ois. Chine*, p. 273 (1877); *Hume & Davison, Str. F.* vi. p. 358 (1878).
Phylloscopus pallasii, *Dubois, Ois. Eur.* p. 83 (1862).
Phyllopneuste superciliosa (*Gmel.*), *Bolle, Journ. Orn.* 1863, p. 60; *Tacz. Bull. Soc. Zool. France*, 1876, p. 141.
Regulus superciliosus (*Gmel.*), *Gray, Cat. Brit. B.* p. 54 (1863).
Phylloscopus superciliosus (*Gmel.*), *Crommelin, Ned. T. D.* iii. p. 244 (1866); *Newt. ed. Yarr. Br. B.* i. p. 443 (1873); *Dresser, B. Eur.* pt. xxx. (1874); *Seebohm, Ibis*, 1877, p. 102; *id. Ibis*, 1879, p. 12.
Sylvia inornata (*Blyth*), *Gray, Hand-l. B.* i. p. 216. no. 3066 (1869).

Phyllopseuste proregulus (*Pall.*), *Giebel, Thes. Orn.* iii. p. 120 (1877).

Spring plumage. General colour of the upper parts olive-green, yellower on the rump and upper tail-coverts; a well-defined, narrow, greenish-yellow eye-stripe extends from the base of the bill to the nape; an irregular and very obscure greenish-yellow mesial line extends from the forehead to the nape; the feathers before the eye, and behind the eye to the nape and the crown, and nape between the mesial line and each eye-stripe dark olive-green; a few still darker feathers emphasizing the eye-stripe on the nape; wing-coverts brown, the lesser wing-coverts with broad olive-green margins, the median and greater wing-coverts with broad, well defined, greenish-yellow tips, forming two conspicuous bars across each wing; quills brown, all the secondaries and four or five of the primaries with conspicuous well defined yellowish-white tips; outside webs of the quills margined with yellowish green fading into yellowish white, and becoming broad and conspicuous on the terminal half of the innermost secondaries; quills emarginated as far as the sixth; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs with a narrow greyish-white margin. General colour of the underparts white, suffused all over with traces of yellowish green; axillaries yellow; under wing-coverts and thighs greyish yellow; inner margins of quills nearly white. Bill slender, Phylloscopine; both mandibles dark brown, the under mandible somewhat paler at the base. Legs, feet, and claws brown. Third, fourth, and fifth primaries longest; second primary generally intermediate in length between the sixth and seventh, very rarely between the seventh and eighth; the exposed part of the bastard primary measures 0·5 to 0·55 inch. Length of wing, male 2·35 to 2·15 inches, female 2·15 to 2·0; length of tail, male 1·85 to 1·7, female 1·7 to 1·55; length of culmen 0·4.

Summer plumage. Nearly all the yellow and green with which both the upper and under parts were suffused has been lost by abrasion; the upper parts have faded into a grey-olive, traces only of the yellowish green remaining on the rump, upper tail-coverts, and the edges of the wing and tail-feathers; all trace of yellow has gone from the eye-stripe and wing-bars, and nearly all from the underparts, leaving the colour greyish white; the conspicuous pale tips to the secondaries and some of the primaries have generally entirely disappeared, the lower wing-bar and the pale edges to the innermost secondaries have become very narrow, and traces only of the upper wing-bar are left.

Autumn plumage. Similar to the spring plumage, but more brilliant, the eye-stripe and the wing-bars yellower, and the upper parts a yellower green; the mesial line on the crown remains as obscure, and the underparts scarcely yellower.

Winter plumage. The same amount of abrasion takes place as in summer, but the upper parts do not become so grey, and the eye-stripe and wing-bars retain a trace of yellow.

The Yellow-browed Barred Willow-Warbler breeds in North

Siberia, and at a high elevation in the mountains of South Siberia; a few stragglers pass through Europe on migration. Winters in South China, the Burma peninsula, and North India.

a, *b*. Ad. sk.	East Siberia.	Prof. Brandt [C.].
c. ♂ ad. sk.	Yenesay, Siberia, lat. 66½°, June 26, 1877.	H. Seebohm, Esq. [C.].
d. ♂ ad. sk.	Dauria, July 17 (*Dr. Dybowsky*).	R. B. Sharpe, Esq. [P.].
e. Ad. sk.	Muddapur, Oct. 21, 1878 (*W. E. Brooks*).	H. Seebohm, Esq. [P.].
f. ♀ ad. sk.	Bynor, N.W. India, Nov. 15 (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
g. Ad. sk.	N.W. India (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
h. Ad. sk.	Hong Kong, Feb. (*Swinhoe*).	H. Seebohm, Esq. [P.].

22. Phylloscopus maculipennis*.

Abrornis chloronotus, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres, App.* pl. 45. no. 839 (*descr. nulla, nec* A. chloronotus, *Hodgs. Gray's Zool. Misc.* p. 82. no. 839); *Hume, Nests Eggs Ind. B.* p. 372 (1873).

Regulus chloronotus (*Hodgs.*), *Gray, Gen. B.* i. p. 175 (1848, *descr. nulla*).

Abrornis maculipennis, *Blyth, Ibis*, 1867, p. 27.

Sylvia maculipennis (*Blyth*), *Gray, Hand-l. B.* i. p. 217. no. 3088 (1869).

Reguloides —— ?, *Blanf. J. A. S. Beng.* xli. pt. 2, p. 163 (1872).

Phylloscopus maculipennis (*Blyth*), *Seebohm, Ibis*, 1877, p. 107.

Regulus maculipennis (*Blyth*), *Giebel, Thes. Orn.* iii. p. 415 (1877).

The plumage of this species is subject to very little seasonal change. The pale tips to the quills are so obscure that their loss by abrasion scarcely alters the appearance of the bird. In very abraded skins the pale tips to the innermost secondaries become lost or obscure, and the broad orange-yellow tips to the greater wing-coverts become dull and narrow.

In full plumage the general colour of the upper parts is yellowish

* The synonymy of this bird is somewhat intricate. Hodgson confused it with *P. proregulus* (Pall.). Both specie are represented in the British Museum amongst the types of "*Abrornis chloronopus* vel *Regulus modestus* auct.," the skins of both species being numbered "839." No. 839 is on plate 57 in the first volume of Hodgson's 'Drawings of Birds of Nepal in the British Museum.' Fig. 5 on this plate undoubtedly represents *P. proregulus* (Pall.), without the grey on the head and throat and without the white on the inside webs of the two outside tail-feathers of *P. maculipennis*, Blyth. The figure bears the name "*Abrornis chloronotus* no. 839, *Reg. modestus* auct.?"

In the Appendix to Hodgson's 'Drawings of Birds of Nepal in the British Museum,' plate 45, are two figures undoubtedly representing *P. maculipennis*, Blyth, showing the grey on the head and the white inside webs of the outside tail-feathers. These figures are also numbered "839."

Inasmuch as neither Hodgson nor Gray published any description of this species, and since it is clear that Hodgson confounded it with the following one, and that consequently his name has been frequently applied to both species, it seems to me perfectly clear that his name must be rejected in favour of that of Blyth.

green, the feathers of the rump, which are much developed, ending in a broad band of deep yellow, which conceals the olive-green upper tail-coverts. The head, nape, and hind neck, the lores, and the space behind the eye to the nape are dark olive-brown; a well-defined pale buff eye-stripe reaches from the base of the bill to the nape; an irregular, pale buff mesial line on the crown reaches from the forehead to the nape. Wing-coverts brown, the lesser wing-coverts with broad yellowish-green margins; the median wing-coverts tipped with deep yellow, forming a narrow upper bar across the wings; and the greater wing-coverts more broadly tipped with the same colour, forming a well-defined, broad, conspicuous, deep-yellow lower bar across the wings; quills brown, edged on the outside web with yellowish green, and emarginated as far as the sixth; innermost secondaries with a well-defined yellowish-white terminal spot on the outer web. Tail-feathers brown, the outside webs margined with yellowish green; two, and frequently three, outside feathers on each side pure white, including their shafts, with the terminal third part of the outer web brown, and the basal third part of the outer web yellow. Underparts from the bill down to the breast greyish white; below, including the axillaries and under wing-coverts, greyish yellow, brightest in the centre of the belly; inner margin of quills nearly white. Bill slender, Phylloscopine, both mandibles dark brown. Legs, feet, and claws brown. Fourth and fifth primaries longest; second primary about equal to the tenth; bastard primary nearly half the length of the second primary, the exposed part measuring 0·5 to 0·55 inch. Length of wing 2·0 to 1·8 inches, tail 1·6 to 1·35, culmen 0·35 to 0·4.

Hodgson's Barred Willow-Warbler probably breeds in the pine-districts of the Himalayas, in Nepal and Sikkim, coming down into the valleys during the cold season.

a, b, c, d, e, f. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
g, h, i. Ad. sk.	Nepal (*Hodgson*).	India Museum [P.].
k, l. Ad. sk.	Darjeeling.	J. Fotheringham, Esq. [P.].
m, n. Ad. sk.	Darjeeling.	Henry Seebohm, Esq. [P.].

23. Phylloscopus proregulus.

Motacilla proregulus, *Pall. Zoogr. Rosso-As.* i. p. 499 (1811).
Regulus modestus, *Gould, B. Eur.* ii. p. 149 (1837).
Regulus proregulus (*Pall.*), *Keys. u. Blas. Wirb. Eur.* p. 184 (1840); *Gray, Gen. B.* i. p. 175 (1848, *partim*).
Abrornis chloronotus, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 57. fig. 5, no. 839, *nude*
Abrornis chloronotus, *Hodgs., Gray's Zool. Misc.* p. 82. no. 839 (1844); *Gray, Cat. M. & Birds Nepal pres. Hodgs.* pp. 66, 152 (1846); *Bp. Consp.* i. p. 291 (1850).
Reguloides chloronotus (*Hodgs.*), *Blyth, Cat. B. Mus. As. Soc.* p. 184 (1849); *Jerdon, B. India*, ii. p. 197 (1863).
Phyllobasileus chloronotus (*Hodgs.*), *Cabanis, Journ. Orn.* 1853, p. 96.
Sylvia (Phyllopneuste) proregulus (*Pall.*), *Middend. Reis. Sibir. Zool.* p. 183 (1853, *partim*).
Reguloides proregulus (*Pall.*), *Swinhoe, Ibis*, 1863, p. 307 *et subseq.*,

id. P. Z. S. 1871, p. 357; *Blanf. J. A. S. Beng.* xli. pt. 2, p. 53 (1872); *Brooks, J. A. S. Beng.* xli. pt. 2, p. 81 (1872); *Hume, Nests Eggs Ind. B.* p. 368 (1873); *Hume & Henders. Lahore to Yark.* p. 220 (1873); *Blyth & Walden, B. Burm.* p. 106 (1875); *Tacz. Bull. Soc. Zool. France*, 1876, p. 141; *Prjev. Rowley's Orn. Misc.* ii. p. 172 (1877); *David et Oust. Ois. Chine*, p. 274 (1877); *Hume, Stray Feath.* vi. p. 358 (1878).

Sylvia (Phyllopneuste) superciliosa (*Gmel.*), *Radde, Reis. Sibir. Vög.* p. 264 (1863, *partim*).

Sylvia proregulus (*Pall.*), *Gray, Hand-l. B.* i. p. 216. no. 3065 (1869).

Phyllopneuste (Phyllobasileus) proregulus (*Pall.*), *Homeyer, Journ. Orn.* 1872, p. 208.

Phylloscopus proregulus (*Pall.*), *Seebohm, Ibis*, 1877, pp. 104, 162.

Spring plumage. General colour of the upper parts olive-green, darker on the head between the mesial line and the eye-stripes, and slightly paler on the upper tail-coverts; rump bright yellow, well defined from the lower back and upper tail-coverts; forehead, a well-defined mesial line extending to the nape, and an equally well-defined eye-stripe on each side also extending to the nape, pale yellow: the feathers before the eye and behind the eye dark brown, and several dark feathers on the edges of the mesial line and eye-stripes and round the nape; wing-coverts brown, the lesser wing-coverts with broad olive-green margins; the median and greater wing-coverts with broad well-defined bright-yellow tips, forming two conspicuous bars across each wing; quills brown, with very narrow white tips; outside edge of the quills margined with yellowish green, becoming broader and paler on the terminal half of the innermost secondaries; quills emarginated as far as the sixth; tail-feathers brown, the outside webs margined with yellowish green, and the inside webs with a narrower greyish-white margin. General colour of the underparts white, suffused with grey on the chin, throat, and lower neck, and with yellow on the breast, flanks, and under tail-coverts; axillaries, under wing-coverts, and thighs yellow; inner margin of quills nearly white. Bill slender, Phylloscopine; both mandibles dark brown, the under mandible somewhat paler at the base. Legs, feet, and claws light brown. Fourth and fifth primaries longest; second primary shorter than the eighth; the exposed part of the bastard primary 0·55 to 0·6 inch. Length of wing, male 2·05 to 1·95 inch, female 1·9 to 1·8; length of tail, male 1·65 to 1·55, female 1·5 to 1·45; length of culmen 0·36 to 0·39.

Summer plumage. The yellow of the mesial line, eye-stripes, wing-bars, and rump becomes paler by abrasion, and the pale tips to the quills disappear; the broad edges to the innermost secondaries become narrow. Otherwise the changes from spring plumage are very slight.

Autumn plumage. Similar to the spring plumage, but more brilliant.

Winter plumage. Scarcely distinguishable from summer plumage.

Pallas's Barred Willow-Warbler breeds in the subalpine districts

of South-eastern Siberia, and throughout the alpine districts of the Himalayas from Cashmere to Burma. Passes through North China on migration, and winters in South China, Burma, and Bengal.

a, b, c, d. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
e, f, g. Ad. sk.	Sikkim (*Mandelli*).	H. Seebohm, Esq. [P.].
h. ♂ ad. sk.	Lake Baikal (*Dybowsky*).	R. B. Sharpe, Esq. [P.].

24. Phylloscopus pulcher.

Abrornis erochroa, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 57. fig. 2, no. 383, *undè Hodgs. Gray's Zool. Misc.* p. 82, no. 383 (1844, *descr. nulla*); *Gray, Cat. Mamm. &c. Nepal pres. Hodgs.* p. 66 (1846, *descr. secunda*); *Bp. Consp.* i. p. 291 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 340 (1854).

Abrornis pulchrala, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 57. no. 879, & pl. 58, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 879 (1844, *descr. nulla*).

Phylloscopus pulcher (*Hodgs.*), *Blyth, J. A. S. Beng.* xiv. p. 592 (1845, *descr. prima*).

Abrornis pulchra (*Hodgs.*), *Gray, Cat. Mamm. &c. Nepal pres. Hodgs.* p. 66 (1846).

Culicipeta pulchra (*Hodgs.*), *Blyth, J. A. S. Beng.* xvi. p. 442 (1847).

Regulus erochroa (*Hodgs.*), *Gray, Gen. B.* i. p. 175 (1848).

Abrornis pulcher (*Hodgs.*), *Blyth, Cat. B. Mus. As. Soc.* p. 183 (1849).

Reguloides erochroa (*Hodgs.*), *Jerdon, B. India*, ii. p. 199 (1863); *Blanf. J. A. S. Beng.* xli. pt. 2, p. 53 (1872); *Godwin-Austen, J. A. S. Beng.* xliii. pt. 2, p. 167 (1874); *Blyth & Walden, B. of Burm.* p. 106 (1875); *Hume & Davison, Stray Feath.* vi. p. 358 (1878).

Sylvia erochroa (*Hodgs.*), *Gray, Hand-l. B.* i. p. 217. no. 3072 (1869).

Reguloides —— ?, *Blanf. J. A. S. Beng.* xli. pt. 2, p. 162 (1872).

Phylloscopus erochrous (*Hodgs.*), *Seebohm, Ibis*, 1877, p. 106.

There appears to be little or no variation between spring and autumn plumage of this species; nor are the effects of abrasion apparent beyond the narrowing of the wing-bar and the lessening of the pale tips of the secondaries.

In full plumage the general colour of the upper parts is dark green, the feathers on the rump, which are much developed, having a broad yellowish-green terminal band concealing the dark-green upper tail-coverts; crown between the eye-stripes, lores, and the feathers behind the eye to the nape dark olive-green; eye-stripe pale buffish green, not very well defined, and extending to the nape; mesial line on the crown nearly obsolete; wing-coverts brown, the lesser coverts with broad green margins, the median coverts with green tips, forming an obscure upper wing-bar; greater coverts with broad well-defined orange tips, forming a conspicuous lower wing-bar; quills brown, on the outside web margined with green fading into yellowish white, and becoming broad and conspicuous on the terminal portion of the innermost secondaries; quills emar-

ginated as far as the sixth; tail-feathers brown, the outside webs margined with green, and the inside webs and shafts of the three outer feathers on each side pure white, the outside web of these feathers being brown on the terminal half, and white tinged with greenish yellow on the basal half. General colour of the underparts dull greenish yellow, brightest on the centre of the belly; inner margin of quills nearly white. Bill slender, Phylloscopine; both mandibles dark brown, the under mandible paler at the base. Legs, feet, and claws brown. Fourth, fifth, and sixth primaries longest; second primary about equal to the tenth; the exposed part of the bastard primary measures 0·55 to 0·65 inch. Length of wing, male 2·45 to 2·3, female 2·25 to 2·1 inches; length of tail, male 2·0 to 1·8, female 1·75 to 1·6; length of culmen 0·5 to 0·45.

The Orange-barred Willow-Warbler breeds in the pine-regions of the Himalayas, in Nepal and Sikkim, coming down into the valleys during the cold season, but rarely, or never, descending into the plains of India.

a, *b*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Abrornis erochroa*, Hodgs.)
c, *d*, *e*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Abrornis pulchrata*, Hodgs.)
f. Ad. sk.	Darjeeling.	J. Fotheringham, Esq. [P.].
g. Ad. sk.	N.W. India (*Capt. G. F. L. Marshall*).	R. B. Sharpe, Esq. [P.].
h. Ad. sk.	Simla.	Capt. Stackhouse Pinwill [P.].
i. Ad. sk.	Sikkim (*Mandelli*).	Henry Seebohm, Esq. [P.].
k. Ad. sk.	Bootan (*Pemberton*).	India Museum.

25. **Phylloscopus subviridis.** (Plate IV. fig. 2.)

Reguloides subviridis, *Brooks*, *P. A. S. Beng.* 1872, p. 148; *Hume*, *Stray Feath.* iv. p. 494 (1876).
Phylloscopus subviridis (*Brooks*), *Seebohm*, *Ibis*, 1877, p. 106.

Spring plumage unknown.
Summer plumage unknown.
Autumn plumage. General colour of the upper parts olive-green, shading into light yellowish green at the termination of the rump-feathers, which are there well defined from the olive-green upper tail-coverts; an irregularly defined greenish-yellow eye-stripe extends from the base of the bill to the nape; a still less regularly defined greenish-yellow mesial line extends from the forehead to the nape; lores, the feathers between the eye and the nape, and between the eye-stripes and the mesial line on the crown olive; wing-coverts brown, the lesser wing-coverts with broad olive-green margins, the median wing-coverts with slightly paler tips forming an obscure bar across the wings, and the greater wing-coverts with broad well-defined pale tips, forming a conspicuous dirty yellowish-white bar across the wings; quills brown, all the secondaries and four or five of the primaries with narrow dirty yellowish-white tips; outside webs of the quills margined with yellowish green, fading into dirty

yellowish white on the terminal half of the innermost secondaries; quills emarginated as far as the sixth; tail-feathers brown, the outside webs edged with yellowish green, and the inside webs, except those of the two centre feathers, with a narrow greyish-white margin. Underparts a nearly uniform greenish yellow; inner margin of quills nearly white. Bill slender, Phylloscopine, dark brown, with the under mandible paler at the base. Legs, feet, and claws brown. Fourth primary slightly the longest; second primary generally intermediate in length between the eighth and ninth, in very rare instances between the seventh and eighth, or between the ninth and tenth; the exposed part of the bastard primary measures 0·5 to 0·6 inch. Length of wing 2·35 to 2·04 inches, tail 1·9 to 1·65, culmen 0·4 to 0·45.

Winter plumage. Similar to the autumn plumage, but with the mesial line on the crown, the bar across the wings, and the pale tips to the quills more or less abraded.

Brooks's Barred Willow-Warbler breeds in the highlands of North-western Cashmere in abundance, and winters in the plains of the North-west Provinces of India, as far east as Cawnpore.

a. Ad. sk.	Murshedabad, Nov. 2, (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
b. Ad. sk.	Etawah, N.W. India, Nov.	W. E. Brooks, Esq. [P.].
c, *d*. Ad. sk.	Cawnpore.	W. E. Brooks, Esq. [P.].
e, *f*, *g*. Ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
h, *i*, *k*. ♂ ad. sk.	Rabuan, Feb. 15; Girov, Jan. 20; Boogia, Feb. 13 (*A. Anderson*).	H. Seebohm, Esq. [P.].

3. HYPOLAIS.

	Type.
Hypolais, *Brehm* *, *Isis*, 1828, p. 1283	H. icterina.
Lusciola, *subgenus* Iduna, *Keys. u. Blas. Wirb. Eur.* p. lviii (1840)	H. caligata.
Iduna, *Bonaparte*, *Consp.* i. p. 295 (1850)	H. caligata.
Jerdonia, *Hume*, *Ibis*, 1870, p. 182.....	H. caligata.
Eleophonus, *Severtzow*, *Str. F.* iii. p. 427 (1875)	H. languida?

The genus *Hypolais* is a small group of birds chiefly remarkable for laying eggs having a french-grey or salmon-coloured ground. They form the connecting link between *Phylloscopus* and *Acrocephalus*, having the nearly even tail of the former and the large bill of the latter. From the large-billed subgeneric group of the former (*Acanthopneustes*), besides the difference of the coloration of the eggs, already alluded to, they can only be distinguished by the absence of the pale tips to the wing-coverts, which in *Acanthopneustes* form one, and often two pale bars across the wings.

All the species of this genus appear to be more or less migratory.

* This writer, as well as others, spells the word erroneously *Hippolais*, under a mistaken idea of its derivation.

They moult twice in the year; and the young birds are scarcely to be distinguished from adults. With the exception of one species, which, for reasons hereafter given, I have divided into five subspecies, there is in no one species any great variation of size; nor does there appear to be any constant difference in size between the sexes. In every species the tarsus is scutellated in front.

All the species of this genus have considerable powers of song.

The basin of the Mediterranean appears to be the centre of distribution of this genus—one or two species extending their range more to the east, one of them as far as Lake Baical.

Key to the Species.

A. General colour of the upper parts olive-green; underparts yellowish; tail nearly even.
(Subgeneric group HYPOLAIDES.)
  a. Second primary generally between the fourth and fifth; bastard primary generally shorter than the primary-coverts, never extending more than 0·05 inch beyond them. Length of wing 3·2 to 2·9 inches. Legs bluish grey ..... *icterina*, p. 77.
  b. Second primary generally between the sixth and seventh; bastard primary exceeding the primary coverts by 0·1 to 0·23 inch. Length of wing 2·6 to 2·38 inches. Legs pale brown ..... *polyglotta*, p. 79.

B. General colour of the upper parts brown or grey; underparts white or pale brown; outside tail-feathers 0·15 to 0·2 inch shorter than the longest.
(Subgeneric group IDUNÆ.)
  a. Bastard primary shorter than the primary-coverts, or not exceeding them more than 0·05 inch ..
    a'. Second primary intermediate between the fourth and fifth; bastard primary falling short of the primary-coverts by 0·2 to 0·25 inch. Length of wing 3·45 to 3·3 inches .. *olivetorum*, p. 79.
    b'. Second primary intermediate between the fifth and sixth; bastard primary falling short of the primary coverts by 0·1 inch, or extending 0·05 beyond them. Length of wing 3·05 to 2·8 inches ..... *languida*, p. 80.
  b. Bastard primary exceeding the primary-coverts by at least 0·1 inch.
    c'. General colour of the upper parts pale sandy brown or isabelline brown ..... *obsoleta*, p. 86.
    d'. General colour of the upper parts darkish rufous brown or grey.
      a''. Second primary generally intermediate between the fifth and sixth; bastard primary exceeding the primary-coverts from 0·1 to 0·3 inch. Length of wing 2·75 to 2·5 inches, culmen 0·7 to 0·6 ..... *pallida*, p. 82.
      b''. Second primary generally intermediate between the fifth and sixth; bastard primary exceeding the primary-coverts from 0·2 to 0·32 inch. Length of wing 2·75 to 2·6

inches, culmen 0·71 to 0·65. Bill less laterally depressed than in allied subspecies *opaca*, p. 83.

c''. Second primary generally intermediate between the seventh and eighth or eighth and ninth; bastard primary exceeding the primary-coverts from 0·2 to 0·4. Length of wing 2·53 to 2·3 inches, culmen 0·6 to 0·53. *rama*, p. 84.

d''. Second primary generally intermediate between the sixth and seventh; bastard primary exceeding the primary-coverts 0·15 to 0·26. Length of wing 2·38 to 2·28 inches, culmen 0·51 to 0·5 ..... *caligata*, p. 85.

1. Hypolais icterina.

Motacilla hypolais, *Linn.** *Syst. Nat.* i. p. 330 (1776).

Sylvia hypolais (*Linn.*), *Bechst.** *Orn. Taschenb.* p. 173 (1802); *Wolf, Taschenb.* i. p. 246 (1810); *Temm. Man. d'Orn.* p. 122 (1815); *id. Man. d'Orn.* i. p. 222 (1820); *Naum. Vög. Deutschl.* iii. p. 540 (1823); *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* fasc. i. p. 24 (1835); *Gould, B. Eur.* ii. pl. 133 (1837); *Nordm. Démid. Voy. Russ. mérid.* iii. p. 141 (1840); *Werner, Atlas, Insectiv.* pl. 53 (1842); *Gray, Gen. B.* i. p. 174 (1848); *Sundev. Sv. Fogl.* p. 68 (1858); *Gray, Hand-l. B.* i. p. 215. no. 3042 (1869).

Muscipeta hypolais (*Linn.*), *Koch* *, *Syst. baier. Zool.* i. p. 170 (1816).

Sylvia icterina, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 194 (1817); *id. Faune Franç.* i. p. 211 (1820).

Hypolais alticeps,
Hypolais media,
Hypolais planiceps, } *Brehm* *, *Isis*, 1828, p. 1283.

Hypolais hypolais (*Linn.*), *Kaup, Natürl. Syst.* p. 96 (1829).

Hypolais salicaria (*Linn.*), *apud Bp. Comp. List B. Eur. & N. Amer.* p. 13 (1838), *apud Jaub. et Barth.-Lapomm. Rich. Orn.* p. 262 (1859), *apud Loche, Expl. Sci. Algér., Ois.* i. p. 273 (1867), *apud Heugl. Orn. N.O.-Afr.* i. p. 29; (1869), *apud Fritsch, Vög. Eur.* p. 161 (1870), *apud Sharpe, Cat. Afr. B.* p. 33 (1871).

Ficedula hypolais (*Linn.*), *Keys. u. Blas. Wirb. Eur.* pp. lvi & 184 (1840); *Schl. Rev. Crit.* p. xxvi (1844); *Heugl. Syst. Uebers.* p. 23 (1856); *Linderm. Vög. Griechenl.* p. 97 (1860); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Doderl. Avif. Sicil.* p. 130 (1869); *Droste, Vogelw. Borkum*, p. 100 (1869); *Gould, B. Gt. Br.* ii. pl. lxxi. (1873).

Hypolais polyglotta (*Vieill.*), *Selys-Longch. Faun. Belg.* p. 99 (1842).

Hypolais icterina (*Vieill.*), *Gerbe, Rev. Zool.* 1844, p. 440; *Degl. et Gerbe, Orn. Eur.* p. 498 (1867); *Salvad. Faun. Ital. Ucc.* p. 109 (1871); *Newton, ed. Yarr. Br. B.* i. p. 360 (1873); *Dresser, B. Eur.* pt. xxviii (1874).

Ficedula ambigua (*Schl.*), *Durazzo, Descr. di Genova*, i. pt. 2, pp. 170, 177 (1846).

Sylvia obscura, *Smith, Ill. Zool. S. Afr., Birds*, pl. 112. fig. 1 (1849).

Phyllopneuste hypolais (*Linn.*), *Schl. Dier. Nederl. Vogels*, p. 58

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* These writers spell the word erroneously *hippolais*, under a mistaken idea of its derivation.

(1861); *Harting, Handb. Br. B.* p. 106 (1872); *Shelley, B. Egypt*, p. 103 (1872); *Gurney, Anderss. B. Damara Land*, p. 100 (1872). Salicaria italica, *Salvad. Atti R. Ac. Sc. Tor.* iii. p. 268 (1868).

In the *adult male in spring plumage* the general colour of the upper parts, including the lores, ear-coverts, and the sides of the neck, is olive-green; a somewhat indistinct greenish-yellow eye-stripe extends from the base of the bill, losing itself behind the eye; the quills are brown, narrowly edged and somewhat more broadly tipped with greenish white; the wing-coverts and innermost secondaries are still more broadly edged with browner white; tail-feathers brown, with very narrow pale edges, and generally with very indistinct traces of transverse bars. The underparts, including the axillaries, are uniform greenish yellow, many of the feathers on the thighs and under wing-coverts having brown centres; inner margin of quills pale grey. Bill Acrocephaline; upper mandible dark brown, under mandible pale horn-colour; rictal bristles moderately developed. Wing with the third primary very slightly longer than the fourth, and the second primary generally intermediate in length between the fourth and fifth, in very rare instances equal to or slightly shorter than the fifth; bastard primary narrow and pointed, generally falling short of the primary-coverts 0·1 inch, but in birds of the year occasionally extending 0·05 inch beyond them. Legs, feet, and claws bluish grey. Length of wing 3·2 to 2·9 inches, tail 2·25 to 2·0, culmen 0·66 to 0·59, tarsus 0·8. Tail nearly even.

The *female* scarcely differs from the male. *After the autumn moult* the olive-green of the upper parts is slightly greyer, and the greenish yellow of the underparts paler and less green. *Birds of the year* scarcely differ from adults in autumn plumage.

The Icterine Tree-Warbler breeds in Central and Northern Europe, from the Atlantic to the Ural Mountains, extending northwards as far as the Arctic circle. In England it is only an accidental visitor. It passes through South Europe and North Africa on migration, and winters in South Africa (Damara Land, Ovampo, &c.).

a, *b*. Ad. st.	Europe.	Baron De Selys Longchamps [P.].
c. Ad. sk.	Europe.	Purchased.
d. ♀ ad. sk.	South Sweden (June 7, *Meves*).	R. B. Sharpe, Esq. [P.].
e, *f*. ♂ ad. sk.	Valkenswaard, Holland (*Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
h. Ad. sk.	Antwerp.	R. B. Sharpe, Esq. [P.].
g, *i*. Ad. sk.	Constantinople (May 9, *W. Pearce*).	R. B. Sharpe, Esq. [P.].
k. Ad. st.	Tunis.	L. Fraser, Esq. [P.].
l. ♀ ad. sk.	Ondonga, Nov. 29 (*C. J. Andersson*).	R. B. Sharpe, Esq.
m. ♂ ad. sk.	Damara Land, Oct. 26 (*C. J. Andersson*).	R. B. Sharpe, Esq.
n. ♂ ad. sk.	Damara Land, March 31 (*C. J. Andersson*).	R. B. Sharpe, Esq. [P.].
o. ♂; *p*. ♀ sk.	Würtemburg.	Dr. Günther.

2. Hypolais polyglotta.

Sylvia polyglotta, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 200 (1817); *id. Faune Franç.* i. p. 212 (1820); *Roux, Orn. Prov.* p. 343 (1825); *Gray, Hand-l. B.* i. p. 213. no. 3043 (1869).
Sylvia flaveola, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 185 (1817); *id. Faune Franç.* i. p. 213 (1820).
Sylvia hypolais (*Linn.*), *Savi, Orn. Tosc.* i. p. 287 (1827).
Ficedula icterina (*Vieill.*), *Keys. u. Blas. Wirb. Eur.* pp. lvi, 185 (1840).
Sylvia icterina, *Vieill., Bp. Faun. Ital. Ucc.* pl. 28. fig. 1 (1841).
Hypolais polyglotta (*Vieill.*), *Gerbe, Rev. Zool.* 1844, p. 440; *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 263 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 502 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 275 (1867); *Salvad. Faun. Ital. Ucc.* p. 110 (1871).
Salicaria hypolais (*Linn.*), *Filippi, Mus. Mediol.* p. 30 (1847).
Ficedula polyglotta (*Vieill.*), *Schl. Vog. Nederl.* p. 136 (1854); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Doderl. Avif. Sicil.* p. 130 (1869).
Hypolais salicaria (*Linn.*), *Fritsch, Vög. Eur.* p. 161 (1870).

This species only differs structurally from the preceding in being slightly smaller, with a slightly different wing-formula. The general colour both of the upper and underparts is less brilliant, being slightly suffused with buff; and the legs, feet, and claws are pale brown. Wing with the third primary very slightly longer than the fourth, and the second primary generally intermediate between the sixth and seventh, in very rare instances a trifle longer than the sixth; bastard primary exceeding the primary-coverts by 0·1 to 0·23 inch. Length of wing 2·6 to 2·38 inches, tail 2·0 to 1·9, culmen 0·6 to 0·54, tarsus 0·85. Tail nearly even.

Changes of plumage similar to those of the preceding species.

The Melodious Tree-Warbler breeds in Algeria, Spain, Italy, and South France, occasionally straying as far north as North France and Belgium. It winters in Senegambia.

a. Ad. sk.	Europe (*Verreaux*).	Purchased.
b. Ad. st.	France.	R. B. Sharpe, Esq.
c. Ad. sk.	Gambia river.	R. B. Sharpe, Esq.
d. Ad. sk.	Gambia river.	Rev. D. F. Morgan [P.].

3. Hypolais olivetorum.

Salicaria olivetorum, *Strickland, fide Gould, B. Eur.* ii. pl. 107 (1837); *Keys. u. Blas. Wirb. Eur.* p. liv (1840); *Linderm. Vög. Griechenl.* p. 88 (1860).
Calamoherpe olivetorum (*Strickl.*), *Bp. Comp. List. B. Eur. & N. Amer.* p. 13 (1838).
Sylvia olivetorum (*Strickl.*), *Temm. Man. d'Orn.* iv. p. 611 (1840); *Werner, Atlas, Insectiv. App.* pl. iv. (1842); *Drummond, Ann. Nat. Hist.* xii. p. 415 (1843); *Gray, Hand-l. B.* i. p. 214. no. 3027 (1869).
Hypolais olivetorum (*Strickl.*), *Gerbe, Rev. Zool.* vii. p. 440 (1844); *Finsch, Tr. Z. S.* vii. p. 233 (1870); *Fritsch, Vög. Eur.* p. 163 (1870); *Shelley, B. Egypt*, p. 99 (1872); *Dresser, B. Eur.* pt. xxvii. (1874).

Ficedula olivetorum (*Strickl.*), *Schleg. Bijd. tot de Dierk. Amsterd.* folio i. p. 27 (1848); *Newton, List B. Eur. Blasius*, p. 11 (1862); *Doderl. Avif. Sicil.* p. 131 (1869).
Calamodyta olivetorum (*Strickl.*), *Gray, Gen. B.* i. p. 172 (1848).
Chloropeta olivetorum (*Strickl.*), *Loche, Expl. Sci. Algér., Ois.* i. p. 269 (1867).

In the *adult male in spring plumage* the general colour of the upper parts, including the lores, ear-coverts, and the sides of the neck, is brownish-grey slightly tinged with olive, especially on the rump and upper tail-coverts; a very indistinct eye-stripe extends from the base of the bill, but can rarely be traced behind the eye; the quills are brown, narrowly tipped and edged with greyish white; the wing-coverts and innermost secondaries are more broadly edged with greyer white; tail-feathers brown, the outer feathers with broad and tolerably well-defined greyish-white margins broadest at the tip, gradually diminishing on the succeeding feathers until they are lost entirely on the two centre ones; very indistinct traces of transverse bars generally observable on the tail-feathers. The underparts are pale buffish white, shading into nearly pure white on the chin, throat, and the centre of the belly, and into pale grey on the flanks; axillaries, under wing-coverts, and thighs buffish white, shading into pale-grey on the centres of the feathers; inner margin of quills very pale buff. Bill Acrocephaline; upper mandible dark brown, under mandible pale horn-colour; rictal bristles small. Wing with the third primary longest, and the second intermediate in length between the fourth and fifth, in rare instances equal to the fourth; bastard primary very narrow and pointed, falling short of the primary-coverts by 0·2 to 0·25 inch. Legs, feet, and claws dark bluish grey. Length of wing 3·45 to 3·3 inches, tail 2·75 to 2·6, culmen 0·78 to 0·7, tarsus 0·95 to 0·85; outside tail-feathers 0·15 to 0·2 shorter than the longest.

The *female* scarcely differs from the male. *After the autumn moult* the general colour of the underparts is greyer. *Birds of the year* scarcely differ from adults in autumn plumage.

The Olive Tree-Warbler is a late summer migrant to Greece, Asia Minor, and Palestine. It also breeds in Algeria. Its winter quarters are unknown; but a solitary example has been obtained in Egypt, and a second in Abyssinia, whence we may infer that they are somewhere in Central Africa.

a. ♂ ad. sk.	Smyrna, July 10 (*Dr. Krüper*).	R. B. Sharpe, Esq.
b. ♀ ad. sk.	Smyrna, May 13 (*Dr. Krüper*).	R. B. Sharpe, Esq.
c. Juv. sk.	Smyrna, July 5 (*Dr. Krüper*).	R. B. Sharpe, Esq.
d. Ad. sk.	Greece.	M. Parzudaki [C.].

4. Hypolais languida.

Curruca languida, *Hempr. et Ehr. Symb. Phys., Aves*, fol. cc (1833).
Salicaria languida (*Hempr. et Ehr.*), *Keys. u. Blas. Wirb. Eur.* p. liv (1840).
Hypolais languida (*Hempr. et Ehr.*), *Cab. Mus. Hein.* i. p. 37 (1850); *Heugl. Orn. N.O.-Afr.* i. p. 296 (1869); *Blanf. Geol. & Zool. Abyss.*

p. 379 (1870); *Dresser, B. Eur.* pt. xxviii. (1874); *Blanf. East. Pers.* ii. p. 183 (1876).
Hypolais upcheri, *Tristram, P. Z. S.* 1864, p. 438; *id. Ibis*, 1867, p. 81.
Sylvia upcheri (*Tristram*), *Gray, Hand-l. B.* i. p. 215. no. 3046 (1869).
Sylvia magnirostris, *Severtz. Turkest. Jevotn.* pp. 65, 123 (1873).
Acrocephalus sogdianensis, *Dresser, Ibis*, 1874, p. 420.
Eleophonus languida (*Hempr. et Ehr.*), *Severtz. Stray Feath.* iii. p. 427 (1875).

In the *adult male in spring plumage* the general colour of the upper parts, including the lower ear-coverts and sides of the neck, is brownish grey; a very indistinct eye-stripe extends from the base of the bill, and can occasionally be traced behind the eye; the quills are brown, narrowly tipped and edged with greyish white; the wing-coverts and innermost secondaries are more broadly edged with greyer white; tail-feathers brown, narrowly margined with greyish white, outside feathers broadly tipped with white, the white tips gradually becoming narrower until they are lost altogether on the two centre feathers; very indistinct traces of transverse bars generally observable on the tail-feathers. The under-parts are pale buffish white, shading into nearly pure white on the chin, throat, and centre of the belly, and into pale brown on the flanks; axillaries, under wing-coverts, and thighs buffish white; inner margin of quills very pale brown. Bill Acrocephaline; upper mandible dark brown, under mandible pale horn-colour; rictal bristles small. Wing with the third and fourth primaries nearly equal and longest, and the second intermediate in length between the fifth and sixth, in rare instances equal to the sixth; bastard primary narrow and generally pointed, usually falling short of the primary-coverts by at least ·05 inch, but occasionally extending that distance beyond them. Legs, feet, and claws dark brown. Length of wing 3·05 to 2·8 inches, tail 2·6 to 2·4, culmen 0·7 to 0·6, tarsus 0·85; outside tail-feathers 0·15 shorter than the longest.

The *female* scarcely differs from the male. *After the autumn moult* the faded summer dress is replaced by a plumage scarcely differing from that of spring. It is not known that *birds of the year* present any peculiarities of plumage.

Upcher's Tree Warbler breeds in Palestine, Syria, Egypt, Northern Abyssinia, South-eastern Persia, Baluchistan, and Turkestan. It is not known whether its migrations extend beyond leaving the mountains, where it has been found up to an elevation of 5000 feet, for the plains. In Turkestan it is certainly only a summer visitor.

a. ♂ ad. sk.	Rairo, Abyssinia, Aug. 13 (*Jesse*).	R. B. Sharpe, Esq.
b. ♀ ad. sk.	Lebka valley, Bogos, 1200 feet.	W. T. Blanford, Esq. [C.].
c, d. Ad. sk.	Bogos.	Mr. Esler [C.].
e. ♂ ad. sk.	East of Shiraz, S. Persia, 5000 feet, June 3.	W. T. Blanford, Esq. [C.].
f. ♀ ad. sk.	Bam, S.E. Persia, 4000 feet, April 25.	W. T. Blanford, Esq. [C.].

Hypolais opaca, Hypolais pallida, Hypolais rama, Hypolais caligata, and Hypolais obsoleta.

This is a very puzzling group of birds. An unbroken series may be found from the largest *H. opaca* from Spain, through the smaller *H. pallida* from Greece and Asia Minor, and the still smaller *H. pallida* and *H. rama* from Persia, down to the small skins of *H. rama* from India and the still smaller *H. caligata* from Turkestan and India, which latter become paler in colour where they live in the more sandy districts and become the form known as *H. obsoleta*. Under these circumstances I see no alternative but to regard the brown-coloured species of *Hypolais* as a most interesting example of a species in the process of breaking up into several species. *H. olivetorum* has obviously become perfectly differentiated and has long ago ceased to intermarry with the inferior caste. *H. languida* has apparently only just succeeded in isolating itself; but I am not sure that in a large enough series of this rare bird intermediate forms might not occur between it and *H. pallida*. The other supposed species can only be considered distinct from each other on the theory that in intermediate localities they habitually hybridize.

The synonymy of the Central and widest spread form is as follows:—

5. Hypolais pallida.

Curruca pallida, *Hempr. et Ehr. Symb. Phys., Aves*, fol. bb (1833).
Curruca andromeda, *Hempr. et Ehr. Symb. Phys., Aves*, fol. bb (1833).
Curruca maxillaris, *Hempr. et Ehr. Symb. Phys., Aves*, fol. bb (1833).
Salicaria pallida (*Hempr. et Ehr.*), *Keys. u. Blas. Wirb. Eur.* p. liv (1840); *Heugl. Syst. Uebers.* p. 22 (1856); *Severtz. Turkest. Jevotn.* pp. 66, 129 (1873).
Salicaria elæica, *Linderm. Isis*, 1843, p. 343; *id. Vög. Griechenl.* p. 90 (1860).
Ficedula ambigua, *Schl. Rev. Crit.* pp. xxvi, 53 (1844).
Hypolais elæica (*Linderm.*), *Gerbe, Rev. Zool.* 1844, p. 440; *Heugl. Orn. N.O.-Afr.* i. p. 297 (1869); *Blanf. Geol. & Zool. Abyss.* p. 380 (1870); *Finsch, Trans. Z. S.* vii. p. 232 (1870); *Fritsch, Vog. Eur.* p. 163 (1870); *Salvad. Faun. Ital. Ucc.* p. 111 (1871); *Sharpe, Cat. Afr. B.* p. 33 (1871); *Shelley, B. Egypt*, p. 100 (1872).
Ficedula elæica (*Linderm.*), *Schl. Bijd. tot de Dierk. Amsterd.* pt. 1, p. 27 (1848); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Filippi, Viagg. Pers.* p. 348 (1865).
Calamodyta elæica (*Linderm.*), *Gray, Gen. B.* i. p. 172 (1848).
Sylvia preglii, *Frauenfeld, Verh. zool.-bot. Ver. Wien*, i. p. 54 (1852).
? Hypolais verdoti, *Jaub. Rev. et Mag. de Zool.* 1855, p. 70.
Sylvia elæica (*Linderm.*), *Von der Mühle, Mon. eur. Sylv.* p. 93 (1856); *Gray, Hand-l. B.* i. p. 214. no. 3028 (1869).
Chloropeta elæica (*Linderm.*), *Bp. Cat. Parzud.* p. 6 (1856); *Loche, Espl. Sci. Algér., Ois.* i. p. 270 (1867).

Hypolais pallida (*Ehr.*), *Dubois, Ois. Eur.* pl. 71 (1862); *Dresser, B. Eur.* pt. xxxi. (1874); *Blanf. East. Pers.* ii. p. 187 (1876).
Acrocephalus pallidus (*Ehr.*), *Heugl. Orn. N.O.-Afr.* i. p. 294 (1869).
Salicaria tamariceti, *Severtz. Turkest. Jevotn.* pp. 66, 131 (1873).

This species is of precisely the same colour as the preceding, and differs from it only in being a slightly smaller bird with a somewhat longer bastard primary. Possibly the legs and feet may be a shade paler in colour. No difference is observable in the shape or colour of the bill, or in the rictal bristles. The wing formula is the same, but the bastard primary is always longer than the primary-coverts, extending beyond them from 0·1 to 0·3 inch. Length of wing 2·75 to 2·5 inches, tail 2·26 to 2·0, culmen 0·7 to 0·6, tarsus 0·9 to 0·8; outside tail-feathers 0·15 inch shorter than the longest.

There are no apparent differences of age, sex, or season beyond those of the usual fading of colour and abrasion of the edges of the feathers, which takes place during summer and winter.

The Olivaceous Tree-Warbler is a regular summer visitor to Palestine, Greece, Asia Minor, and probably Italy. Its breeding-range extends eastwards through Persia to Turkestan, and southwards through Egypt to Abyssinia. Its winter quarters appear to be unknown.

a. ♂ ad. sk.	Smyrna, June 15 (*Dr. Krüper*).	R. B. Sharpe, Esq.
b. ♂ juv. sk.	Smyrna, July 22 (*Dr. Krüper*).	R. B. Sharpe, Esq.
c. Ad. sk.	Greece (*Parzudaki*).	Purchased.
d. Ad. sk.	Constantinople.	F. Godman and O. Salvin, Esqrs. [P.].
e, f, g, h. ♂ ♀ ad. sk.	Palestine.	Canon Tristram [C.].
i. ♂ ad. sk.	Palestine, April (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
k. ♂ ad. sk.	Palestine, March 19 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
l. Ad. sk.	Egypt.	J. Bowring, Esq. [C.].
m. Ad. sk.	Assouan, Egypt, March 27.	J. H. Gurney, Esq. [P.].
n. ♀ ad. sk.	Gelamet, Abyssinia, August 4 (*Jesse*).	R. B. Sharpe, Esq
o. ♀ ad. sk.	Bogos, 200 feet.	W.T.Blanford,Esq.[C.].
p. Ad. sk.	Shiraz, Persia.	Col. St. John [C.].
q. Ad. sk.	Shiraz, 4750 feet.	Col. St. John [C.].
r. Ad. sk.	Persia.	Chas. Darwin, Esq. [P.].
s. ♂ ad. sk.	Bampur, Baluchistan, 3000 feet, April 7.	W. T. Blanford, Esq. [C.].

The synonymy of the Western form is as follows:—

6. Hypolais opaca.

Sylvia opaca, *Licht. fide Cab. Mus. Hein.* i. p. 36 (1850).
Hypolais opaca (*Licht.*), *Cab. Mus. Hein.* i. p. 36 (1850); *Homeyer,*

Journ. Orn. 1853, extra Heft, p. 92; *Hartl. Orn. W.-Afr.* p. 60 (1857); *Dresser, B. Eur.* pt. xxviii. (1874).

Hypolais pallida (*Hemp. et Ehr.*), *apud L. Gerbe, Rev. et Mag. de Zool.* 1852, p. 174.

Phyllopneuste opaca (*Cab.*), *Licht. Nomencl. Av.* p. 30 (1854).

Chloropeta pallida (*Hemp. et Ehr.*), *apud Bp. Cat. Parzud.* p. 6 (1856), *apud Loche, Expl. Sci. Algér., Ois.* i. p. 271 (1867).

Hypolais arigonis, *Brehm, Allg. deutsch. naturh. Zeit.* iii. p. 467 (1857).

Ficedula cinerascens, *De Selys, fide Newton, List B. Eur. Blasius*, p. 11 (1862).

Hypolais cinerascens, *Brehm, Ill. Thierleben*, p. 865 (1866); *De Selys, fide Degl. et Gerbe, Orn. Eur.* i. p. 506 (1867); *Heugl. Orn. N.O.-Afr.* i. p. 297 (1869).

Hypolais fuscescens, *De Selys, fide Loche, Expl. Sci. Algér., Ois.* i. p. 271 (1867).

? Hypolais verdoti, *Jaub. apud Loche, Expl. Sci. Algér., Ois.* i. p. 276 (1867).

I am unable to detect the slightest difference in colour between this bird and the one previously described, of which I consider it to be a Western form. On an average it is certainly a larger bird, with a wider and less laterally depressed bill; but small skins from Spain are indistinguishable from large skins from Asia Minor.

The wing formula of the subspecies under consideration does not differ from that of the two previously described birds, and the bastard primary extends beyond the primary-coverts from 0·2 to 0·32 inch. Length of wing 2·75 to 2·6 inches, tail 2·3 to 2·15, culmen 0·71 to 0·65, tarsus 0·9; outside tail-feathers 0·2 inch shorter than the longest.

I have been unable to discover any differences in the plumage attributable to age, sex, or season, beyond that of summer and winter abrasions.

The Western Olivaceous Tree-Warbler is a regular summer visitor to Southern Spain and Algeria, wintering in West Africa.

a. ♀ ad. sk.	Malaga, Spain, July 6, 1876.	Henry Seebohm, Esq. [P.].
b, *c*. Ad. sk.	Tunis.	L. Fraser, Esq. [C.].
d. Ad. sk.	Morocco (*Olcese*).	R. B. Sharpe, Esq. [P.].
e. Ad. sk.	Tangier (*Olcese*).	Col. Irby [P.].
f. ♂ ad. sk.	Algeria (*Verreaux*).	Purchased.
g. Ad. sk.	Abeokuta (*H. Robin*).	F. Nicholson, Esq. [P.].
h, *i*. Ad. sk.	Gambia River.	Purchased.

The synonymy of the Western Asiatic form is as follows:—

7. Hypolais rama.

Sylvia rama, *Sykes, P. Z. S.* 1832, p. 89.

Phyllopneuste rama (*Sykes*), *Blyth, Cat. B. Mus. As. Soc.* p. 183 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 335 (1854); *Jerd. B. Ind.* ii. p. 189 (1863).

Hypolais rama (*Sykes*), *Blanf. East. Persia*, ii. p. 187 (1876).

This subspecies is a shade darker in colour, both above and below, than typical *H. pallida*. It is on an average a somewhat smaller

bird, with a shorter second primary and a longer bastard primary. The third, fourth, and fifth primaries are nearly equal and longest; the second primary is usually intermediate in length between the seventh and eighth, and not unfrequently between the eighth and ninth, and, in rare instances, between the sixth and seventh; the bastard primary exceeds the primary-coverts by 0·2 to 0·4 inch. Length of wing 2·53 to 2·3 inches, tail 2·25 to 1·9, culmen 0·6 to 0·53, tarsus 0·85 to 0·8; outside tail-feathers 0·25 to 0·15 inch shorter than the longest.

After the autumn moult the underparts are somewhat more suffused with pale buffish brown than appears to be the case after the spring moult; otherwise I can discover no differences attributable to age, sex, or season beyond the usual wear and tear of abrasion.

Sykes's Tree-Warbler breeds in the valley of the Lower Volga, Persia, Turkestan, and Cashmere, and winters in the plains of India.

a. ♂ ad. sk.	Ispahan, 5000 feet, July 10.	W. T. Blanford, Esq. [C.].
b. ♂ ad. sk.	Karman, Persia, 5700 feet, May 28.	W. T. Blanford, Esq. [C.].
c. ♂ ad. sk.	Shiraz, Persia, 5300 feet, June 2.	W. T. Blanford, Esq. [C.].
d, *e*. ♂ ad. sk.	Bampur, Baluchistan, 2000 feet, April 6.	W. T. Blanford, Esq. [C.].
f. ♂ ad. sk.	Dizak, Baluchistan, 4000 feet, March 22.	W. T. Blanford, Esq. [C.].
g, *h*. Ad. sk.	North-west India.	R. B. Sharpe, Esq. [P.].
i. ♂ ad. sk.	Agra, Feb. 8 (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
k, *l*. Ad. sk.	Deccan (*Sykes*).	India Museum. (Types of *Sylvia rama*, Sykes.)
m. Ad. sk.	Madras.	T. C. Jerdon, Esq. [P.].
n. Ad. sk.	India.	T. C. Jerdon, Esq. [P.].

The synonymy of the Eastern Asiatic form is as follows:—

8. Hypolais caligata.

Motacilla salicaria, *Linn. apud Pallas, Zoogr. Rosso-Asiat.* i. p. 492 (1811).

Sylvia caligata, *Licht., Eversm. Reise Buchara*, p. 128 (1823); *Gray, Hand-l. B.* i. p. 209, no. 2367 (1869).

Iduna (Lusciola) caligata (*Licht.*), *Keys. u. Blas. Wirb. Eur.* pp. lviii, 190 (1840).

Sylvia scita, *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* fasc. iii. p. 12 (1842); *Severtz. Turkest. Jeroln.* pp. 66, 130 (1873).

Salicaria caligata (*Licht.*), *Schl. Rev. Crit.* p. 60 (1844).

Hypolais swainsoni, *Hodgs. MS. Drawings* (*in the Brit. Mus.*) *of B. of Nepal, Passeres*, pl. 58. fig. 6, no. 385 bis, *unde* Hypolais swainsoni, *Hodgs., Gray's Zool. Misc.* p. 82. no. 385 (1844); *Gray, Cat. Mamm. and B. Nepal Coll. Hodgs.* p. 65 (1846, *partim*).

Calamodyta caligata (*Licht.*), *Gray, Gen. B.* i. p. 172 (1848).

Calamoherpe caligata (*Licht.*), *Degl. Orn. Eur.* i. p. 576 (1849).

Calamoherpe scita (*Eversm.*), *Bp. Consp.* i. p. 285 (1850).

Iduna salicaria (*Linn.*), *apud Bp. Consp.* i. p. 295 (1850); *Newt. List B. Eur. Blasius*, p. 11 (1862).

Iduna caligata (*Licht.*), *Gray, fide Bp. Consp.* i. p. 295 (1850); *Fritsch, Vög. Eur.* p. 161 (1870).
Sylvia (Iduna) salicaria (*Linn.*), *apud Naum. Vög. Deutschl.*, Anhang, p. 78 (1860).
Phyllopneuste rama (*Sykes*), *apud Jerd. B. Ind.* ii. p. 189 (1863, *partim*).
Hypolais caligata (*Licht.*), *Degl. et Gerbe, Orn. Eur.* i. p. 510 (1867); *Dresser, B. Eur.* pt. xxxviii. (1875); *Dresser, Ibis*, 1876, p. 88.
Jerdonia agricolensis, *Hume, Ibis*, 1870, p. 182.
Calamodyta agricolensis (*Hume*), *Tristram, Ibis*, 1870, p. 494.
Salicaria brevipennis, *Severtz. Turkest. Jevotn.* pp. 66, 127 (1873); *Dresser, Ibis*, 1876, p. 83.
Salicaria pallida (*Eversm.*), *Severtz. Turkest. Jevotn.* pp. 66, 129 (1873, *nec Ehrenb.*); *Dresser, Ibis*, 1876, p. 87.
Salicaria microptera, *Severtz. Stray Feath.* iii. p. 425 (1875).
Locustella salicaria (*Linn.*), *apud Tacz. Bull. Soc. Zool. France*, 1876, p. 139.

This subspecies is slightly smaller than the preceding, but with the longer second primary and the shorter bastard primary of the more western races.

In colour it does not differ from the bird last mentioned. The third, fourth, and fifth primaries are nearly equal and longest; the second primary is usually intermediate in length between the sixth and seventh, but it is frequently only as long as, and occasionally shorter than, the seventh; the bastard primary exceeds the primary-coverts by 0·26 to 0·15 inch. Length of wing 2·38 to 2·28 inches, tail 1·95 to 1·8, culmen 0·51 to 0·5, tarsus 0·85; outside tail-feathers 0·1 to 1·5 inch shorter than the longest.

The slight changes of plumage in this subspecies are the same as those of the preceding.

The Booted Tree-Warbler breeds in Cashmere, Turkestan, and Southern Siberia, probably ranging eastwards as far as the Lena. It winters in the plains of India. A solitary individual has been captured on Heligoland; otherwise I have never seen a European specimen.

a. Ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
b. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Hypolais swainsoni*, Hodgson.)
c. Ad. sk.	North-west India.	Capt. Stackhouse Pinwill [P.].
d. Ad. sk.	North-west India.	R. B. Sharpe, Esq. [P.].
e. Ad. sk.	Madras.	T. C. Jerdon, Esq. [P.].
f. Ad. sk.	Russia.	Dr. Brandt.

The synonymy of the desert form is as follows:—

9. Hypolais obsoleta.

Salicaria obsoleta, *Severtz. Turkest. Jevotn.* pp. 66, 129 (1873); *Dresser, Ibis*, 1876, p. 87.

This subspecies is a desert form of *H. rama* or *H. caligata*, possibly of both. The general colour of the upper parts is a sandy

brown or pale isabelline brown. In other respects the coloration is the same as that of the two or three preceding subspecies. The third and fourth primaries are nearly equal and longest; the second primary in a skin from Turkestan is intermediate in length between the sixth and the seventh, and in one from Scinde between the seventh and eighth; the bastard primary exceeds the primary-coverts by 0·35 inch in both skins. Length of wing 2·4 inches, tail 2·0; culmen in the Turkestan skin 0·51, in the Scinde skin 0·6; tarsus, in the Turkestan skin 0·86 (very pale), and in the Scinde skin 0·8 (darkish brown).

So far as is known the Desert Tree-Warbler is confined to the sandy regions of Turkestan in summer, and to those of Scinde in winter. The only skins I have seen are the type of *Salicaria obsoleta*, Severtz., from Turkestan, and a skin from Scinde, both in my own collection.

4. ACROCEPHALUS.

	Type.
Acrocephalus, *Naum. Nat. Land- u. Wass.-Vög. nördl. Deutschl., Nachtr.* iv. p. 199 (1811)	A. turdoides?
Muscipeta, *Koch, Syst. baier. Zool.* p. 162 (1816)	A. turdoides?
Calamoherpe, *Boie, Isis*, 1822, p. 552	A. turdoides?
Calamodus, *Kaup, Natürl. Syst.* p. 117 (1829)	A. phragmitis.
Calamodyta, *Kaup, Natürl. Syst.* p. 118 (1829, *ex Meyer*)	A. aquaticus.
Hydrocopsichus, *Kaup, Natürl. Syst.* p. 121 (1829)	A. turdoides.
Arundinaceus, *Lesson, Traité d'Orn.* p. 419 (1831)	A. turdoides?
Salicaria, *Selby, Brit. Orn.* p. 197 (1833, *partim*)	A. turdoides?
Junco, *Reichenbach, Natürl. Syst.* pl. lxi. (1850)	A. turdoides?
Eparnetes, *Reichenbach, Natürl. Syst.* pl. lvii. (1850)	A. syrinx?
Caricicola, *Brehm, Naum.* 1855, p. 284	A. phragmitis.

Bill of *Acrocephalus streperus*.

The genus *Acrocephalus* comprises a well-marked group of birds familiarly known as Reed-Warblers, and is distinguished by the possession of a very minute bastard primary and a moderately rounded tail. The bastard primary is so minute that in adult birds it does not usually extend as far as the primary-coverts. In birds of the year, and in one or two species slightly aberrant in this respect, it is usually somewhat longer, occasionally extending beyond them.

The bill is typically large, depressed and broad at the base, with

moderately developed rictal bristles. In two of the species the bill is somewhat aberrant, being as slender as in the genus *Locustella*. These two species are also distinguished by a different style of colouring, each feather on the head and back being darker in the centre. The existence of two other intermediate species makes it, however, advisable not to separate them more than subgenerically from the typical *Acrocephali*.

The tail is more rounded than in *Hypolais*, and much more so than in *Phylloscopus*, but not so much so as in *Locustella*, the outside tail-feathers being longer than the under tail-coverts.

The general colour of the plumage is a more or less uniform brown, sometimes olive-brown, sometimes russet-brown, gradually fading, as the plumage becomes abraded, into a neutral brown or dust-brown, not inaptly described as *museum* colour.

Most of these birds are migratory, and moult twice in the year, shortly before each journey. Their breeding-range extends over the whole of the central and southern Palæarctic Region, but only one species extends as far north as the Arctic Circle. They winter in the tropical regions of Africa and Asia, and are especially common in the islands of the Malay archipelago. Two species apparently migrate south instead of north to breed, and resort to the swamps of Australia for that purpose. Two other species appear to be non-migratory—one having found a permanent home in South Africa, and the other in the Caroline Islands in the Pacific.

Key to the Species.

A. Crown between the eyebrows with two or more dark longitudinal bands. Bill somewhat narrowed at the base, and slender as in *Locustella*, but rictal bristles fairly developed.
(Subgeneric group CALAMODI.)

a. Second primary longer than the fourth.

a'. Two broad dark longitudinal bands on the crown ..... *aquaticus*, p. 89.

b'. Four dark longitudinal bands on the crown ..... *phragmitis*, p. 91.

b. Second primary shorter than the sixth.

c'. A dark stripe over each eye. Feathers of the crown and upper parts generally with dark centres ..... *sorgophilus*, p. 94.

d'. A dark stripe over each eye, otherwise the crown and upper parts uniform in colour *bistrigiceps*, p. 94.

B. Crown between the eyebrows uniform in colour. Bill wide at the base, and more robust than in *Locustella*; rictal bristles fairly developed.
(Subgeneric group ACROCEPHALI.)

c. Length of wing from 3·9 to 2·7 inches; if under 3 inches, second primary equal to or shorter than the fifth.

c'. Length of wing 3·9 to 3·6 inches. Second primary equal to the third, or between the third and fourth. Legs and feet pale brown ..... *turdoides*, p. 95.

f'. Length of wing 3·5 to 2·7 inches. Second primary equal to or shorter than the fourth. Legs and feet slaty brown.
a''. General colour of upper parts olive-brown.
a'''. Length of wing 3·5 to 3·0 inches; tail about one ninth less, 3·1 to 2·7; culmen 0·95 to 0·8. Second primary between the third and fifth ..... *orientalis*, p. 97
b'''. Length of wing 3·5 to 3·0 inches; tail only about one twentieth less, 3·4 to 2·9; culmen 1·05 to 0·88. Second primary between the fifth and seventh .... *stentoreus*, p. 98.
c'''. Length of wing 2·9 inches, tail 2·7, culmen 1·0. Second primary between the sixth and seventh ..... *syrinx*, p. 100.
d'''. Length of wing 3·0 to 2·7 inches, tail 2·8 to 2·5, culmen 0·8 to 0·7. Second primary between the fifth and seventh ..... *australis*, p. 100.
b''. General colour of upper parts russet-brown ..... *longirostris*, p. 99.
d. Length of wing 2·8 to 2·0 inches; if over 2·7, second primary longer than the fifth.
g'. Second primary longer than the fifth.
c''. Upper parts olive-brown ..... *palustris*, p. 101.
d''. Upper parts with a slight russet tinge, most decided on the rump..... *streperus*, p. 102.
h'. Second primary shorter than the fifth.
e''. Upper parts olive-brown ..... *dumetorum*, p. 104.
f''. Upper parts with a decided russet tinge, most pronounced on the rump.
e'''. Length of wing 2·5 to 2·2 inches, tail 2·2 to 2·0, culmen 0·67 to 0·6 *bæticatus*, p. 106.
f'''. Length of wing 2·3 to 2·0 inches, tail same length, culmen 0·56 to 0·52 .. *agricola*, p. 105.

1. Acrocephalus aquaticus.

Acrocephalus aquaticus (*Temm.*)*.
? Sylvia schœnobœnus (*Linn.*), *apud Scop. Ann.* i. p. 158 (1769).
? Aquatic Warbler, *Lath. Gen. Syn.* ii. p. 419 (1783, *ex Scopoli*).
? Motacilla aquatica, *Gm. Syst. Nat.* i. pt. 2, p. 953 (1788, *ex Scopoli et Latham*).
? Sylvia aquatica (*Gmel.*), *Lath. Ind. Orn.* ii. p. 510 (1790).
Sylvia salicaria (*Linn.*), *apud Bechst. Orn. Taschenb.* p. 185 (1802); *apud Wolf, Taschenb.* i. p. 232 (1810).

* The Aquatic Warbler has by no means a clear title to its name. Scopoli's bird may have been either a Sedge-Warbler or an Aquatic Warbler; but his description is inconsistent with either of them. Neither Gmelin nor Latham appear to have known the bird, but have simply copied Scopoli. Bechstein, Meyer and Wolf, and Naumann were well acquainted with the bird, but identified it, probably incorrectly, with the *Motacilla salicaria* of Linnæus, a name which has been transferred from one species to another, until it has long ago ceased to have any definite meaning or any scientific value. Temminck was

Acrocephalus salicarius (*Linn.*), *apud Naum. Nat. Land- u. Wass.-Vög. nördl. Deutschl., Nachtr.* Heft iv. p. 203 (1811).
Sylvia aquatica (*Gmel.*), *Temm. Man. d'Orn.* p. 131 (1815); *Temm. Man. d'Orn.* i. p. 188 (1820); *Naum. Vög. Deutschl.* iii. p. 686 (1823); *Werner, Atlas, Insectivores*, pl. 28 (1842); *Kjærb. Danm. Fugle*, p. 169 (1852); *Sundev. Sv. Fogl.* p. 71 (1856); *Fallon, Ois. Belge*, p. 48 (1875).
Muscipeta salicaria (*Linn.*), *apud Koch, Syst. baier. Zool.* i. p. 164 (1816).
Sylvia paludicola, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 202 (1817); *Vieill. Faune Franç.* i. p. 225 (1820); *Roux, Orn. Prov.* i. p. 354 (1825).
Sylvia cariceti, *Naum. Isis*, 1821, p. 785; *Naum. Vög. Deutschl.* iii. p. 668 (1823); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 146 (1840); *Schl. Rev. Crit.* p. 58 (1844); *Kjærb. Danm. Fugle*, p. 169 (1852); *Sundev. Sv. Fogl.* p. 71 (1856).
Calamoherpe aquatica (*Gmel.*), *Boie, Isis*, 1822, p. 552; *Selys-Longch. Faun. Belg.* p. 102 (1842).
Calamoherpe cariceti (*Naum.*), *Boie, Isis*, 1822, p. 552.
Sylvia striata, *Brehm, Lehrb. Naturg.* i. p. 365 (1823).
Calamodyta aquatica (*Gmel.*), *Kaup, Natürl. Syst.* p. 118 (1829); *Gray, Gen. B.* i. p. 172 (1840); *Bp. Cat. Metod. Ucc. Eur.* p. 35 (1842); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 254 (1859); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 535 (1867); *Loche, Expl. Sci. Algér., Ois.* p. 263 (1867); *Gray, Hand-l. B.* i. p. 209. no. 2965 (1869); *Doderl. Avif. Sicil.* p. 128 (1869); *Fritsch, Vög. Eur.* p. 156 (1870); *Salvad. Faun. Ital. Ucc.* p. 116 (1871); *Shelley, B. Egypt*, p. 92 (1872); *Gould, B. Gt. Br.* ii. pl. lxxvi. (1873).
Calamoherpe limicola, *Brehm, Vög. Deutschl.* p. 451 (1831).
Calamoherpe striata (*Brehm*), *Brehm, Vög. Deutschl.* p. 452 (1831).
Salicaria aquatica (*Gmel.*), *Gould, B. Eur.* ii. pl. 111. fig. 2 (1837); *Keys. u. Blas. Wirb. Eur.* p. 182 (1840); *Schl. Rev. Crit.* p. xxviii (1844); *Linderm. Vög. Griechenl.* p. 93 (1860); *Harting, Handb. Br. B.* p. 105 (1872).
Calamodyta cariceti (*Naum.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838); *Gray, Gen. B.* i. p. 172 (1848).
Calamodyta schœnobænus (*Linn.*), *apud Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838).
Calamodus salicarius (*Linn.*) *apud Cab. Mus. Hein.* i. p. 39 (1850).
Acrocephalus aquaticus (*Gmel.*), *Newt. ed. Yarr. Br. B.* i. p. 380 (1873); *Dresser, B. Eur.* pt. li. (1876).

The general colour of the upper parts is a pale tawny brown; eye-stripe very distinct, greyish white, and extending almost to the nape; lores and the feathers behind the eye russet-brown; over each eye-stripe a broad very dark-brown streak passes to the nape, leaving a narrow mesial line on the crown; each feather of the rest of the upper parts, including the wing-coverts, innermost

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the first writer to use the name *aquatica* to a clearly defined species; and since his name has been in general use, and has not been extensively, if at all, applied to any other species in the genus, we are, in my opinion, justified in calling the Aquatic Warbler *Acrocephalus aquaticus* (Temm.), consigning the *Motacilla aquatica* of Gmelin, and the *Sylvia aquatica* of Latham, beyond the *limbo* of synonyms to the *lethe* of pre-Linnæan oblivion.

secondaries, and tail, has a more or less distinct dark-brown centre, the quill-feathers only being uniform brown. In abraded summer plumage the underparts are nearly white, buffer on the throat and flanks in spring, and more or less suffused all over with buff in autumn. In many skins the lower throat and flanks are striated; in this plumage they are the *A. cariceti* of Naumann; these striations occur both in birds shot in abraded breeding-plumage and in the fulvous plumage after the autumn moult. Most ornithologists ascribe the striated underparts to the adult plumage, and the unstriated to birds of the year; but I have not been able to obtain a sufficient series of skins to satisfy myself of the truth of such an exceptional change. The bill is Locustelline and the rictal bristles only slightly developed; the upper mandible is dark and the under mandible pale. Legs, feet, and claws pale horn-colour. Length of wing 2·5 to 2·35 inches, tail 2·0 to 1·8, culmen 0·52 to 0·49. Second primary equal to or nearly equal to the third.

The Aquatic Reed-Warbler breeds in Central and Southern Europe from the Atlantic to the Ural Mountains, also in North Africa. Its winter quarters are unknown, but are doubtless in some part of the African continent.

a. Ad. sk.	Unsern, Switzerland, Aug. 30, 1869.	H. Seebohm, Esq. [P.].
b. ♂ ad. sk.	Villacidro, Sardinia, April 13, 1871 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
c. ♂ ad. sk.	Villacidro, Sardinia, April 13, 1871 (*A. B. Brooke*).	H. Seebohm, Esq. [P.].
d. ♂ ad. sk.	South France, Sept. 1876.	H. Seebohm, Esq. [P.].
e. Ad. st.	France.	R. B. Sharpe, Esq.
f. Ad. st.	Europe.	

2. Acrocephalus phragmitis*.

? La Fauvette de bois, ou la Roussette, *Briss. Orn.* iii. p. 393 (1760).

Motacilla schœnobænus, *Linn. Syst. Nat.* i. p. 329 (1766, *descr. maliss.*); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 196 (1817).

Motacilla salicaria, *Linn. apud Tunstall, Orn. Brit.* p. 2 (1771), *apud Donovan, Nat. Hist. Br. B.* ii. pl. xlviii. (1794).

? La Roussette, ou la Fauvette des bois, *Buff. Hist. Nat. Ois.* v. p. 139 (1778).

? Reed Warbler, *Lath. Gen. Syn.* ii. p. 418 (1783).

Sedge Warbler, *Lath. Gen. Syn.* ii. p. 430 (1783).

Sylvia salicaria (*Linn.*), *apud Lath. Gen. Syn. Suppl.* i. p. 287 (1787), *apud Lath. Ind. Orn.* ii. p. 516 (1790), *apud Leach, Cat. Mamm.*

* In my opinion no possible good can arise, and much confusion must be caused, by rejecting the name in common use for the Sedge-Warbler, which was well defined by Bechstein, in favour of the ill-defined name supposed to have been given to it by Linnæus. I admit that the evidence of the 'Fauna Suecica' leaves little room for doubt that Linnæus intended to describe the Sedge-Warbler, but his description was so bad that it met with the neglect that it deserved.

&c. Brit. Mus. p. 23 (1816), *apud Forster, Syn. Cat. Br. B.* p. 53 (1817).

? Sylvia schœnobænus (*Linn.*), *Lath. Ind. Orn.* ii. p. 510 (1790).

Sylvia phragmitis, *Bechst. Orn. Taschenb.* p. 186 (1802); *Wolf, Taschenb.* i. p. 234 (1810); *Temm. Man. d'Orn.* i. p. 189 (1820); *Naum. Vög. Deutschl.* iii. p. 648 (1823); *Ménétr. Cat. Rais. Caué.* p. 33 (1832); *Jenyns, Man. Brit. Vertebr.* p. 106 (1835); *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* p. 23 (1835); *Temm. Man. d'Orn.* iii. p. 115 (1835); *Crespon, Orn. Gard.* p. 114 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 145 (1840); *Werner, Atlas, Insectiv.* pl. 29 (1842); *Kjærb. Danm. Fugle*, p. 168 (1852); *Fallon, Ois. Belg.* p. 48 (1875).

Acrocephalus phragmitis (*Bechst.*), *Naum. Nat. Land- u. Wass.-Vög. nördl. Deutschl., Nachtr.* iv. p. 202 (1811).

Muscipeta phragmitis (*Bechst.*), *Koch, Syst. baier. Zool.* i. p. 163 (1816).

Sylvia schœnobænus (*Linn.*), *Vieill. Faune Franç.* i. p. 224 (1820); *Roux, Orn. Prov.* i. p. 352 (1825); *Sundev. Sv. Fogl.* p. 69 (1856).

Calamoherpe phragmitis (*Bechst.*), *Boie, Isis*, 1822, p. 552; *Brehm, Vög. Deutschl.* p. 449 (1831); *Macgill. Br. B.* ii. p. 390 (1839); *Selys-Longch. Faun. Belg.* p. 101 (1842); *Schl. Vog. Nederl.* p. 145 (1854).

Curruca salicaria (*Linn.*), *apud Fleming, Brit. An.* p. 69 (1828).

Calamodus phragmitis (*Bechst.*), *Kaup, Natürl. Syst.* p. 117 (1829).

Calamoherpe tritici, *Brehm, Vög. Deutschl.* p. 449 (1831).

Calamoherpe schœnobænus (*Linn.*), *Brehm, loc. cit.* p. 450 (1831).

Salicaria phragmitis (*Bechst.*), *Selby, Brit. Orn.* i. p. 201 (1833); *Gould, B. Eur.* ii. pl. 110 (1837); *Keys. u. Blas. Wirb. Eur.* pp. liv, 182 (1840); *Schl. Rev. Crit.* p. xxviii (1844); *Thomps. B. Ire.* i. p. 180 (1849); *Linderm. Vög. Griechenl.* p. 92 (1860); *Harting, Handb. Br. B.* p. 14 (1872).

Calamodyta phragmitis (*Bechst.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 253 (1859); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 533 (1867); *Loche, Expl. Sci. Algér., Ois.* p. 262 (1867); *Doderl. Avif. Sicil.* p. 128 (1869); *Droste, Vogelw. Borkum*, p. 100 (1869); *Fritsch, Vög. Eur.* p. 155 (1870); *Salvad. Faun. Ital. Uce.* p. 115 (1871); *Gould, B. Gt. Br.* ii. pl. lxxv. (1873).

Sylvia tritici, *Brehm, Naum.* 1855, p. 284.

Sylvia subphragmitis, *Brehm, Naum.* 1855, p. 284.

Caricicola phragmitis (*Bechst.*), *Brehm, Vogelf.* p. 236 (1855).

Caricicola tritici, *Brehm, loc. cit.* (1855).

Caricicola schœnobænus (*Linn.*), *Brehm, loc. cit.* (1855).

Caricicola subphragmitis, *Brehm, loc. cit.* (1855).

Calamodyta schœnobænus (*Linn.*), *Gray, Hand-l. B.* i. p. 209. no. 2964 (1869); *Shelley, B. Egypt*, p. 91 (1872).

Acrocephalus schœnobænus (*Linn.*), *Newt. ed. Yarr. Br. B.* i. p. 376 (1873); *Dresser, B. Eur.* pt. lvi. (1876).

Calamodus schœnobænus (*Linn.*), *Blanf. East. Pers.* ii. p. 199 (1876).

The general colour of the upper parts is russet-brown, each feather having an obscure dark centre. These dark centres are most conspicuous, becoming nearly black on the head, wing-coverts, and innermost secondaries, and disappear altogether on the rump, which

is very tawny; eye-stripe very distinct, buffish white, not extending to the nape; lores and the feathers behind the eye russet-brown; wings and tail-feathers brown, the margins of the outside webs edged with russet-brown. The underparts buffish white, darkest on the breast and flanks. After the autumn moult the eye-stripe and the underparts are still more suffused with buff. After both moults, but especially in spring, the whitish tips to the quills are very conspicuous, but these are soon lost by abrasion. Bill Locustelline, but the rictal bristles fairly developed; upper mandible dark, under mandible pale. Legs, feet, and claws pale brown. Length of wing 2·7 to 2·4 inches, tail 2·15 to 1·9, culmen 0·6 to 0·5. Second primary equal to or a trifle shorter than the third.

The Sedge-Warbler, or Sedge Reed-Warbler, breeds throughout Europe and Siberia at least as far east as the Yenesay; its northern range extends slightly north of the Arctic Circle. It winters in South Africa.

a. Ad. sk.	Wiltshire.	Col. Montagu [P.].
b, *c*, *d*. ♂ ♀ ad. sk.	Avington, Hants, May.	Capt. Shelley [P.].
e, *g*. ♂ ♀ ad. sk.	Avington, Hants, May.	R. B. Sharpe, Esq. [P.].
i. Juv. sk.	Pagham, Sussex, Sept. 4.	R. B. Sharpe, Esq. [P.].
k, *l*. Ad sk.	Cookham, Berks.	R. B. Sharpe, Esq. [P.].
m, *n*. Ad. st.	Cambridgeshire.	Mr. J. Baker [C.].
o. ♂ ad. sk.	Rottisham, Cambridge, May 1856 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
p. Ad. sk.	Cambridge, Oct. 5, 1850 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
q. Ad. sk.	Wicken Fen, April 29, 1856 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
r. ♂ ad. sk.	Skåne, Sweden, May 23 (*Meves*).	R. B. Sharpe, Esq. [P.].
s. Ad. st.	Heligoland.	Henry Seebohm, Esq. [P.].
t. ♀ ad. sk.	Guiksu, Asia Minor, Oct. 10, 1867 (*Robson*).	F. Godman and O. Salvin, Esqrs. [P.].
u. ♂ ad. sk.	Gennesareth, Palestine.	Canon Tristram [P.].
v. ♂ ad. sk.	Petchora, N.E. Russia (*Seebohm & Harvie-Brown*).	Capt. Feilden and J. A. Harvie-Brown, Esq. [P.].
w. ♂ ad. sk.	Obb, Siberia, July 17.	Dr. O. Finsch [C.].
x. ♂ ad. sk.	Yenesay, lat. 66½°, E. Siberia, June 23.	H. Seebohm, Esq. [P.].
y, *z*. ♂; *a'*, *b'*. ♀ ad. sk.	Potchefstroom, Transvaal, April 13 to 27 (*W. Lucas*).	R. B. Sharpe, Esq. [P.].
c', *d'*. Ad. sk.	Otjimbinque, Damara Land, Dec. 21 (*Andersson.*)	R. B. Sharpe, Esq.
e', *f'*. Skeleton.	England (Warwick).	Purchased.

3. Acrocephalus sorgophilus.

Calamodyta sorgophila, *Swinhoe, P. Z. S.* 1863, pp. 92, 293.
Calamodus sorgophilus (*Swinh.*) *Swinhoe, P. Z. S.* 1871, p. 354; *David et Oust. Ois. Chine*, p. 246 (1877).

The general colour of the upper parts is russet-brown, each feather with an obscure dark centre, most fulvous on the rump and upper tail-coverts and the margins of the outside webs of the quills and tail-feathers; the wing-coverts and innermost secondaries are very dark brown, edged externally with buffish white; eye-stripe distinct buffish white, scarcely extending to the nape; lores and the feathers behind the eye russet-brown; over each eye-stripe a narrow dark band, well defined next the eye-stripes, but gradually fading into the brown of the crown. Underparts fulvous white, darkest on the flanks and thighs. The bill is intermediate between *Acrocephalus* and *Locustellæ*; upper mandible dark, under mandible pale. Legs, feet, and claws brown. Length of wing 2·3 inches, tail 1·75, culmen 0·6. Third and fourth primaries equal and longest; second primary intermediate in length between the sixth and seventh.

Swinhoe's Reed-Warbler has only been found in South China, where it is supposed to breed.

The British Museum does not possess an example of this species, which is only known from the type in the Swinhoe collection in my possession. It was obtained at Amoy on the 20th of May, 1861.

4. Acrocephalus bistrigiceps.

Acrocephalus bistrigiceps, *Swinhoe, Ibis*, 1860, p. 51.
Calamoherpe maackii, *Schrenck, Vög. Amur-Lande*, p. 370, pl. 12. figs. 4–6 (1860); *Dyb. Journ. Orn*, 1874, p. 320; *id. Journ. Orn.* 1875, p. 245; *Taez. Bull. Soc. Zool. Fr.* i. p. 138 (1876); *Dyb. Journ. Orn.* 1876, p. 194.
Calamoherpe bistrigiceps, *Swinhoe, P. Z. S.* 1863, p. 293.
Calamodyta bistrigiceps, *Swinhoe, P. Z. S.* 1871, p. 353.
Acrocephalus maackii, *Hume, Stray Feathers*, 1874, p. 478.
Calamodyta maackii, *David et Oust. Ois. Chine*, p. 254 (1877).

The general colour of the upper parts is russet-brown, slightly greyer on the head, quills, and tail, and most rufous on the rump and upper tail-coverts and the margins of the outside webs of the quills and tail-feathers; the eye-stripe is narrow, greyish white, very distinct, but not extending as far as the nape; when fresh moulted the quills and tail-feathers have narrow pale edges at and near the tips, which are soon lost by abrasion; the wing-coverts and innermost secondaries gradually become paler towards the edge on their outer side webs; lores and the feathers behind the eye russet-brown; over each eye-stripe a broad dark-brown band, abruptly defined over each eye-stripe, and gradually fading into the brown of the crown of the head. The breast and flanks are pale rufous-brown, shading into pale buff on the centre of the belly and under tail-coverts, and into nearly white on the throat and chin; the axillaries, thighs, under wing-coverts, and the inner edging of the quills are pale brownish

buff. The bill is Locustelline, but the rictal bristles are fairly developed; the upper mandible is dark, the under mandible pale. The legs, feet, and claws are pale horn-colour. Length of wing 2·2 to 2·1 inches, tail 2·1 to 1·85, culmen 0·6 to 0·52. Third and fourth primaries nearly equal and longest; second primary generally intermediate in length between the sixth and seventh, occasionally between the seventh and eighth; bastard primary exceeding the primary-coverts by 0·15 to 0·25 inch.

After the autumn moult both the upper and under parts are more rufous than in spring; and in winter, and especially in summer, much of the rufous coloration is lost by abrasion.

Schrenck's Reed-Warbler breeds in the valley of the Amoor, and has been taken frequently in Japan, where it probably also breeds. It passes through China on migration, and has been found wintering in the Tenasserim Provinces.

a. ♀ ad. sk. Argun R., Transbaical, East Siberia, Ju 17, 1873 (*Dr. Dybowski*). Warsaw Museum [E.].

5. Acrocephalus turdoides*.

La Rousserolle ou Roucherolle, *Briss. Orn.* ii. p. 219, pl. 22. fig. 1 (1760.)

Turdus arundinaceus, *Linn. Syst. Nat.* i. p. 296 (1766); *Gmel. Syst. Nat.* i. p. 834 (1788); *Lath. Ind. Orn.* i. p. 334 (1790); *Bechst. Orn. Taschenb.* p. 152 (1802); *Wolf, Taschenb.* i. p. 202 (1810); *Temm. Man. d'Orn.* p. 96 (1815); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 240 (1818); *Vieill. Faune Franç.* p. 160 (1820).

La Rousserolle, *Montb. Hist. Nat. Ois.* iii. p. 293 (1775); *Daubent. Pl. Enl.* no. 513 (1775).

The Reed Thrush, *Lath. Gen. Syn.* ii. p. 32 (1783).

Acrocephalus lacustris, *Naum. Natur. Land- u. Wass.-Vög. nördl. Deutschl., Nachtr.* iv. p. 201 (1811).

Turdus junco, *Pall. Zoogr. Rosso-Asiat.* i. p. 458 (1811).

Sylvia turdoides, *Meyer, Vög. Liv- u. Esthl.* p. 116 (1815); *Temm. Man. d'Orn.* i. p. 181 (1820); *Naum. Vög. Deutschl.* iii. p. 597 (1823); *Ménétr. Cat. Rais. Cauc.* p. 32 (1832); *Temm. Man. d'Orn.* iii. p. 109 (1835); *Crespon, Orn. Gard.* p. 111 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 141 (1840); *Werner, Atlas, Insectiv.* pl. 23 (1842); *Kjærb. Danm. Fugle*, p. 167 (1852); *Sundev. Sv. Fogl.* p. 70 (1856); *Fallon, Ois. Belg.* p. 46 (1875).

Muscipita lacustris (*Naum.*), *Koch, Syst. baier. Zool.* i. p. 166 (1816).

Calamoherpe turdoides (*Meyer*), *Boie, Isis*, 1822, p. 552; *Brehm*,

* I have retained the name in common use for the Great Reed-Warbler, contrary to the rules of the British Association, because it is the name in common use. *Acrocephalus arundinaceus* (Linn.) may be rejected under the rules, because, in placing the species under the genus *Turdus*, the definition became so misleading as to admit of the specific name being applied to the Common Reed-Warbler. *Acrocephalus lacustris* (Naum.) is the name by which it ought to be known if the rules are to be enforced. *Acrocephalus junco* (Pall.) may be rejected on the ground of want of clear definition also, inasmuch as Pallas did not remove it from the genus *Turdus*.

Vög. Deutschl. p. 441 (1831); *Bp. Comp. List B. Eur. & N. Amer.* p. 13 (1838); *Bp. Consp.* i. p. 284 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 258 (1859); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 515 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 256 (1867); *Doderl. Avif. Sicil.* p. 124 (1869).

Hydrocopsichus turdoides (*Meyer*), *Kaup, Natürl. Syst.* p. 121 (1829).

Arundinaceus turdoides (*Meyer*), *Less. Traité d'Orn.* p. 419 (1831).

Calamoherpe lacustris (*Naum.*), *Brehm, Vög. Deutschl.* p. 442 (1831).

Calamoherpe stagnatilis, *Brehm, Vög. Deutschl.* p. 442 (1831).

Salicaria turdoides (*Meyer*), *Gould, B. Eur.* ii. pl. 106 (1837); *Keys. u. Blas. Wirb. Eur.* pp. liii, 181 (1840).

Acrocephalus arundinaceus (*Linn.*), *Gray, List Gen. B.* p. 28 (1841); *Newt. ed. Yarr. Br. B.* i. p. 364 (1873); *Blanford, East. Pers.* ii. p. 195 (1876); *Gurney, Ibis*, 1878, p. 288; *Dresser, B. Eur.* pt. lxix. (1878).

Sylvia turdina, *Gloger, Handb. Naturg.* p. 312 (1842).

Salicaria turdina (*Gloger*), *Schleg. Rev. Crit.* p. xxvii (1844); *Linderm. Vög. Griechenl.* p. 87 (1860).

Calamodyta arundinacea (*Linn.*), *Gray, Gen. B.* i. p. 172 (1848); *Gray, Hand-l. B.* i. p. 207. no. 2917 (1869).

Calamoherpe media, *Ma'm, Œfv. Vet.-Ak. Handl.* 1851, p. 159.

Calamoherpe turdina (*Gloger*), *Schleg. Vog. Nederl.* p. 142 (1854).

Calamoherpe major, *Brehm, Naum.* 1855, p. 284.

Calamoherpe longirostris, *Brehm, Naum.* 1855, p. 284.

Acrocephalus turdoides (*Meyer*), *Heugl. Orn. N.O.-Afr.* i. p. 289 (1869); *Salvad. Faun. Ital. Ucc.* p. 113 (1871), *Shelley, B. Egypt*, p. 96 (1872); *Gould, B. Gt. Br.* ii. pl. 72 (1873); *Seebohm, Ibis*, 1879, p. 435.

Acrocephalus arabicus, *Heugl. Orn. N.O.-Afr.* i. p. 289 (1869).

Calamodyta (Calamoherpe) turdoides (*Meyer*), *Fritsch, Vög. Eur.* p. 150 (1870).

Salicaria arundinacea (*Linn.*), *Harting, Handb. Br. B.* p. 14 (1872).

Acrocephalus fulvolateralis, *Sharpe, ed. Layard's B. S. Afr.* p. 289 (1877).

The general colour of the upper parts is olive-brown with a slight shade of rufous, scarcely perceptible on the head, quills, and tail-feathers, and most pronounced on the rump and the margins of the outside webs of the quills and tail-feathers; the eye-stripe is very obscure, buffish white, and does not extend as far as the nape. When fresh moulted the quills and tail-feathers have narrow pale edges at and near the tips; but these are soon lost by abrasion. The wing-coverts and the innermost secondaries gradually become paler towards the edge on their outside webs; the breast, flanks and under tail-coverts are pale rufous-brown, shading into nearly white on the chin, throat, and centre of belly; the axillaries, thighs, and under wing-coverts and the inner margin of the quills are pale buffish brown. The bill is typically Acrocephaline; the upper mandible dark, the under mandible pale. The legs, feet, and claws are pale horn-colour. Length of wing 3·85 to 3·6 inches, tail 3·5 to 3·0, culmen 0·9 to 0·8. Second primary equal, or nearly so, to the third, which is the longest.

After the autumn moult the general colour of the underparts is much more fulvous. In this stage of plumage it is the *A. fulvolateralis* of Sharpe.

The specific characters of this bird are its large size, pointed wing, and pale legs.

The Great Reed-Warbler breeds in Central and Southern Europe; it winters in South Africa—Transvaal, Natal, Damara Land, Congo river, &c.

a.	Ad. sk.	Europe.	Purchased.
b.	Ad. st.	Holland.	Leadenhall Market.
c.	♂ ad. sk.	Holland (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
d.	♀ ad. sk.	Valkenswaard, Holland (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
e.	♀ ad. sk.	Owerkerk, Holland (*J. Baker*).	
f.	♀ ad. sk.	Belgium, June 18.	Brussels Museum.
g.	Ad. st.	France.	R. B. Sharpe, Esq. [P.].
h.	Ad. sk.	Italy.	Purchased.
i.	Ad. sk.	Zana, Algeria (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
k.	♂ ad. sk.	Landana, Congo river, January 30 (*Messrs. Lucan & Petit*).	A. Bouvier.
l.	Ad. sk.	Bogos Land.	Mr. Esler [C.].
m.	Ad. sk.	Potchefstroom, Transvaal, Feb. 25 (*W. Lucas*).	R. B. Sharpe, Esq. [P.].
n.	Ad. sk.	Natal.	R. B. Sharpe, Esq. (Type of *A. fulvolateralis*, Sharpe.)

6. Acrocephalus orientalis.

Sylvia turdoides, *Meyer apud Kittl. Lütke, Voy.* (*Postels*) iii. p. 327.

Salicaria turdina orientalis, *Temm. et Schleg. Faun. Japon., Aves*, p. 50 (1847).

Salicaria turdoides orientalis, *Temm. et Schleg. Faun. Japon., Aves*, pl. xx B. (1847).

Calamoherpe orientalis (*Temm. et Schleg.*), *Bp. Consp.* i. p. 285 (1850); *Swinhoe, Ibis*, 1863, p. 305; *id. P. Z. S.* 1863, p. 293, and 1870, p. 427; *Tacz. Journ. Orn.* 1874, p. 319, and 1875, p. 245; *Tacz. Bull. Soc. Zool. France*, 1876, p. 138; *Blakiston & Pryer, Ibis*, 1878, p. 237.

Acrocephalus orientalis (*Temm. et Schleg.*), *Gray, P. Z. S.* 1860, p. 349; *Wald. Tr. Z. S.* viii. p. 64 (1872), ix. p. 195 (1875).

Acrocephalus magnirostris, *Swinhoe, Ibis*, 1860, p. 51, and 1861, pp. 32, 329.

Calamodyta orientalis (*Temm. et Schleg.*), *Gray, Hand-l. B.* i. p. 207. no. 2919 (1869); *Swinhoe, P. Z. S.* 1871, p. 352; *Prjev. Rowley's Orn. Misc.* ii. p. 169 (1877); *David et Oust. Ois. Chine*, p. 252 (1877).

This species does not differ in any respect from the preceding in colour (and is subject to the same change after the autumn moult), with the exception of the legs and feet, which are slate-grey instead of pale horn-colour. Length of wing 3·5 to 3·0 inches, tail 3·1 to 2·7,

culmen 0·95 to 0·8. Third primary longest; second primary frequently intermediate in length between the third and fourth, and as often between the fourth and fifth.

This is the Eastern form of *A. turdoides*, differing from that species in its smaller size, slightly more rounded wing, and darker legs. *Birds of the year* have indistinct dark streaks on the throat, and pale tips to the tail-feathers.

The Chinese Great Reed-Warbler breeds in the valley of the Amoor, in North China, and Japan. It passes through South China on migration, and winters in the islands of the Malay archipelago and the Burma peninsula, having been found as far west as Pegu and the S. Andaman Islands, and as far south as Lombock.

a. Ad. sk.	Japan.	Prof. Brandt [C.].
b. Ad. sk.	Shanghai.	W. Webb, Esq. [P.].
c. Ad. sk.	Amoy, May.	R. Swinhoe, Esq. [C.].
d. Ad. sk.	Foochoo (*R. Swinhoe*).	F. Godman and O. Salvin, Esqrs. [P.].
e. Ad. sk.	China.	J. Reeves, Esq. [P.].
f. ♀ ad. sk.	S. Andamans, Dec. 29 (*Wimberley*).	R. B. Sharpe, Esq. [P.].
g, *h*, *i*. Ad. sk.	Malacca.	Capt. Stackhouse Pinwill [P.].
k. Ad. sk.	Java.	Purchased.
l. Ad. sk.	Philippines.	Purchased.
m. Ad. sk.	Manilla.	Hugh Cuming, Esq. [C.].
n. Ad. sk.	Labuan, Borneo.	Hugh Low, Esq. [C.].
o. Ad. sk.	Moara Is., N.W. Borneo.	Governor Ussher [C.].
p. Ad. sk.	Lumbidan, W. Borneo.	Governor Ussher [C.].
q. Ad. sk.	Sibu Is., W. Borneo, April 27.	A. Everett, Esq. [C.].
r. Ad. sk.	Bintulu, W. Borneo.	A. Everett, Esq. [C.].
s. Ad. sk.	Bouru Island.	A. R. Wallace, Esq. [C.].
t, *u*, *v*, *w*, *x*. ♂ ad. sk.	Lombock.	A. R. Wallace, Esq. [C.].
y, *z*. ♀ ad. sk.	Batchian.	A. R. Wallace, Esq. [C.].
a'. Ad. sk.	Morty Is.	A. R. Wallace, Esq. [C.].

7. Acrocephalus stentoreus.

Curruca stentorea, *Hempr. et Ehr. Symb. Phys., Aves*, fol. bb (1833).

Agrobates brunnescens, *Jerd. Madr. Journ.* x. p. 269 (1839).

Malacocercus? abnormis, *Hodgs. MS. Drawings* (*in the Brit. Mus.*) *of B. of Nepal, Passeres*, pl. 54. no. 816, *undè*

Malacocercus? abornis, *Hodgs.*, *Gray's Zool. Misc.* p. 83. no. 816 (1844).

Calamoherpe brunnescens (*Jerd.*), *Blyth, J. A. S. Beng.* xv. p. 218 (1846); *Bp. Consp.* i. p. 285 (1850).

Acrocephalus brunnescens (*Jerd.*), *Blyth, Cat. B. Mus. As. Soc.* p. 181 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 331 (1854); *Jerd. B. Ind.* ii. p. 154 (1863); *Hume & Henders. Lahore to Yark.* p. 214, pl. xvi. (1873).

Calamoherpe longirostris, *v. Müll. Naum.* 1851, iv. p. 27.

Calamoherpe macrorhyncha, *v. Müll. Beitr. Orn. Afr.* t. 9 (1853).

Acrocephalus stentoreus (*Hempr. et Ehr.*), *Cab. Journ. Orn.* 1854,

p. 445; *Allen*, *Ibis*, 1864, p. 97, pl. i.; *Heugl. Orn. N.O.-Afr.* i. p. 287 (1869); *Shelley*, *B. Egypt*, p. 95 (1872); *Blanf. East. Persia*, ii. p. 194 (1876); *Dresser*, *B. Eur.* pt. lxii. (1877).

Salicaria stentoria (*Hempr. et Ehr.*), *Ehr. Syst. Uebers.* p. 23 (1856).

Acrocephalus orientalis (*T. & S.*) *apud Gray*, *P. Z. S.* 1860, p. 349.

Calamodyta brunnescens (*Jerd.*), *Gray*, *Hand-l. B.* i. p. 207. no. 2918 (1869).

Calamodyta stentoria (*Hempr. et Ehr.*), *Gray*, *Hand-l. B.* i. p. 207. no. 2930 (1869).

Calamodyta meridionalis, *Legge*, *Str. Feath.* iii. p. 369 (1875).

This species does not differ in any respect from the preceding in colour, and is subject to the same change after the autumn moult. The bill is proportionally somewhat larger; the legs, feet, and claws are slaty brown. Length of wing 3·5 to 3·0 inches, tail 3·4 to 3·0, culmen 1·05 to 0·88. Third and fourth primaries nearly equal and longest; second primary about equal to the sixth, sometimes a trifle longer, sometimes a trifle shorter.

This species might almost be considered a subspecies of *A. orientalis*; but from its restricted range of migration it has apparently become differentiated, and may always be recognized by its larger bill, longer tail, and more rounded wing.

The Indian Great Reed-Warbler appears to have a very limited range of migration. It appears to be resident in Egypt, to breed in Turkestan and the highlands of Persia, and winter in the lowlands of the latter country. It also breeds in Cashmere, Nepal, and probably other localities in the Himalayas, wintering in the valley of the Ganges. There appears also to be a colony resident in Ceylon.

a. Ad. sk.	Egypt (*Capt. Shelley*).	R. B. Sharpe, Esq. [P.].
b. ♂ ad. sk.	Shiraz, S. Persia, 4720 ft., July 6 (*Major St. John*).	Col. St. John [C.].
c. ♂ ad. sk.	Shiraz, S. Persia, 4700 ft., June 8.	W. T. Blanford, Esq. [C.].
d. Ad. sk.	Cashmere.	Capt. Stackhouse Pinwill [P.].
e, *f*, *g*. Ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
h. Ad. sk.	India.	Dr. Jerdon [P.].
i. Ad. sk.	India.	India Museum.
k. Ad. sk.	Dacca (*Tytler*).	India Museum.
l. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].

8. Acrocephalus longirostris.

Calamoherpe longirostris, *Gould*, *P. Z. S.* 1845, p. 20; *Bp. Consp.* i. p. 285 (1850); *Gould*, *Handb. B. Austr.* i. p. 403 (1865); *Ramsay*, *Proc. Linn. Soc. N.S.W.* ii. p. 186 (1878).

Acrocephalus longirostris (*Gould*), *Gould*, *B. Austr.* iii. pl. xxxviii. (1848).

Calamodyta longirostris (*Gould*), *Gray*, *Gen. B.* i. p. 172 (1848); *Gray*, *Hand-l. B.* i. p. 207. no. 2920 (1869).

This species differs from all the other Great Reed-Warblers in

having the upper parts decidedly russet-brown, darkest on the head and palest on the rump. In the colour of its underparts it does not differ from its near allies; the legs, feet, and claws are dark. Length of wing 3·03 to 2·9 inches, tail 2·87 to 2·62, culmen 0·84 to 0·8, tarsus 1·1 to 1·04. Third primary longest; second primary equal to or slightly longer than the sixth.

The West-Australian Great Reed-Warbler inhabits West Australia, being a summer migrant only to the south.

a. Ad. sk.	Australia.	Purchased.

9. Acrocephalus australis.

Sylvia arundinacea (*Linn.*) *apud Lewin, B. New Holl.* pl. 18 (1822).
Acrocephalus australis, *Gould, B. Austr.* iii. pl. xxxvii. (1848); *Diggles, Orn. Austr.* pl. xlvii. fig. 3 (1870).
Calamodyta australis (*Gould*), *Gray, Gen. B.* i. p. 172 (1848); *Gray, Hand-l. B.* i. p. 208. no. 2943 (1869).
Calamoherpe australis (*Gould*), *Bonap. Consp.* i. p. 285 (1850); *Gould, Handb. B. Austr.* i. p. 402 (1865); *Ramsay, Proc. Linn. Soc. N. S. W.* ii. p. 186 (1878).

This species does not differ in any respect from the preceding in colour, and is apparently subject to the same change after the autumn moult. The bill is somewhat shorter; the legs, feet, and claws are dark brown. Length of wing 3·0 to 2·7 inches, tail 2·7 to 2·4, culmen 0·8 to 0·7. Third primary longest; second primary between the fifth and seventh.

This species is a south-eastern form of *A. orientalis*, differing in having a more rounded wing. From that species and from *A. stentoreus* it differs in being of smaller size (especially in the culmen); and from the last-mentioned species it also differs in having a proportionally shorter tail.

The East-Australian Reed-Warbler appears to breed in South-eastern Australia, where it is a migratory bird, arriving in September and retiring north in March during the cold season.

a, *b*. Ad. sk.	South Australia.	Sir G. Grey [P.].
c. Ad. sk.	N.E. Australia.	Sir T. Mitchell [P.].
d. Ad. sk.	Lombock.	A. R. Wallace, Esq. [C.].

10. Acrocephalus syrinx.

Sylvia syrinx, *Kittl. Mém. l'Acad. St. Pétersb.* ii. p. 6, pl. 8 (1835).
Sylvia oceanica, "*Kittl. in Mus. Senckenb.*," *fide Finsch, Journ. Mus. Godeffr.* xii. p. 30 (1876).
Tataré rousserolle, *Hombr. et Jacq. Atl. Voy. Pôle Sud*, pl. 20. fig. 5 (1853).
Tataré syrinx (*Kittl.*), *Jacq. et Puch. Voy. Pôle Sud*, iii. p. 92 (1853).
Eparnetes syrinx (*Kittl.*), *Reichb. Nat. Syst.* pl. lviii. (1850); *Bonap. Compt. Rend.* 1855, p. 111.
Acrocephalus orientalis (*T. & S.*), *apud Pelz. Novara-Reise*, pp. 63, 162 (1865).

Calamodyta syrinx (*Kittl.*), *Gray, Hand-l. B.* i. p. 208. no. 2948 (1869).

Calamoherpe syrinx, *Kittl., Finsch, Journ. Mus. Godeffr.* xii. p. 30 (1876); *id. P. Z. S.* 1877, p. 778.

This appears to be nearly allied to *A. stentoreus*, differing from that species only in being of slightly smaller size, and in having a proportionally shorter tail. It would scarcely be deserving of specific rank had it not become isolated in its geographical distribution. It is of exactly the same colour as the three preceding species, and is apparently subject to the same seasonal changes. The legs, feet, and claws are dark brown. Length of wing 3·0 to 2·9 inches, tail 2·75 to 2·55, culmen 1·0 to 0·95, tarsus 1·05. Third and fourth primaries nearly equal and longest; second primary intermediate in length between the sixth and seventh.

So far as is known, Kittlitz's Great Reed-Warbler is confined to Ponapé or Pinnipet, one of the more easterly of the Caroline Islands, where it is said to be a resident species.

a. Ad. sk. Ponapé. Godeffroy Museum [C.].

11. Acrocephalus palustris.

Motacilla camtschatkensis, *Gmel. apud Bechst. Naturg. Deutschl.* iv. p. 667 (1795).

Sylvia palustris, *Bechst. Orn. Taschenb.* p. 186 (1802); *Wolf, Taschenb.* i. p. 237 (1810); *Temm. Man. d'Orn.* i. p. 192 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 81 (1822); *Naum. Vög. Deutschl.* iii. p. 630 (1823); *Roux, Orn. Prov.* i. p. 348 (1825); *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* p. 22 (1835); *Temm. Man. d'Orn.* iii. p. 116 (1835); *Crespon, Orn. Gard.* p. 117 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 144 (1840); *Werner, Atlas, Insectiv.* pl. 31 (1842); *Kjærb. Danm. Fugle*, p. 164 (1852); *Sund. Sv. Fogl.* p. 70 (1856); *Fallon, Ois. Belg.* p. 49 (1875).

Acrocephalus palustris (*Bechst.*), *Nat. Land- u. Wass.-Vög. nördl. Deutschl., Nachtr.* Heft iv. p. 202 (1811); *Salvad. Faun. Ital. Ucc.* p. 111 (1871); *Blanf. East. Pers.* ii. p. 197 (1876); *Dresser, B. Eur.* pt. lvi. (1877).

Calamoherpe palustris (*Bechst.*), *Boie, Isis*, 1822, p. 552; *Brehm, Vög. Deutschl.* p. 445 (1831); *Bp. Comp. List B. Eur. & N. Amer.* p. 13 (1838); *Selys-Longch. Faun. Belg.* p. 100 (1842); *Schl. Vog. Nederl.* p. 144 (1854); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 200 (1859); *Newton, List B. Eur. Blasius*, p. 11 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 518 (1867); *Loche, Expl. Sci. Algér., Ois.* p. 259 (1867); *Doderl. Avif. Sicil.* p. 125 (1869); *Droste, Vogelw. Borkum*, p. 101 (1869); *Shelley, B. Egypt*, p. 94 (1872); *Gould, B. Gt. Br.* ii. pl. lxxiv. (1873).

Calamoherpe salicaria (*Linn.*), *apud Brehm, Vög. Deutschl.* p. 444 (1831).

Calamoherpe musica, *Brehm, Vög. Deutschl.* p. 446 (1831).

Salicaria palustris (*Bechst.*), *Gould, B. Eur.* ii. pl. 109 (1837); *Keys. u. Blas. Wirb. Eur.* pp. liii, 181 (1840); *Schl. Rev. Crit.* p. xxvii (1844); *Harting, Handb. Br. B.* p. 104 (1872).

Calamodyta palustris (*Bechst.*), *Gray, Gen. B.* i. p. 172 (1848).

Sylvia (Calamoherpe) fruticola, *Naum. Vög. Deutschl.* xiii. p. 453 (1853).

Calamoherpe philomela, *Brehm, Vogelf.* p. 236 (1855).
Calamoherpe pratensis, *Jaub. Rev. et Mag. de Zool.* vii. p. 65 (1855).
Calamodyta (Calamoherpe) palustris, *Fritsch, Vög. Eur.* p. 152 (1870).
Salicaria macronyx, *Severtz. Turkest. Jevotn.* pp. 66, 128 (1873); *Dresser, Ibis*, 1876, p. 84.

The general colour of the upper parts varies from olive-brown in spring plumage to earthy brown in summer plumage, with a scarcely perceptible shade of rufous after the autumn moult, slightly paler on the rump; eye-stripe nearly obsolete; innermost secondaries with broad ill-defined pale edges; wing-coverts, quills, and tail-feathers a slightly darker brown, with narrow edges to the outside webs of the same colour as the back; quills and tail-feathers, when fresh-moulted, with narrow pale edges at and near the tips, but these are soon lost by abrasion. The breast, flanks, and under tail-coverts are pale buff, shading into nearly white on the chin, throat, and centre of belly; the axillaries, thighs, and under wing-coverts, and the inner lining of the quills are pale buff. *After the autumn moult* the whole of the underparts are suffused with buff. The bill is Acrocephaline, the upper mandible dark and the under mandible pale; the rictal bristles are very slightly developed. The legs, feet, and claws are pale horn-colour. Length of wing 2·8 to 2·45 inches, tail 2·4 to 2·0, culmen 0·7 to 0·57. Second primary very slightly shorter than the third, in rare instances shorter than the fourth.

The Marsh Reed-Warbler breeds in Central and Southern Europe, extending its range eastwards as far as Persia, and possibly as far as Turkestan. It winters in Central Africa.

a. Ad. st.	Europe.	
b. ♀ ad. sk.	Valkenswaard, Holland.	F. Godman and O. Salvin, Esqrs. [P.].
c. ♀ ad. sk.	N. of Shiraz, S. Persia, 7000 feet.	W. T. Blanford, Esq. [C.].

12. Acrocephalus streperus*.

La Fauvette de Roseaux, *Briss. Orn.* iii. p. 378 (1760); *Buff. Hist. Nat. Ois.* v. p. 142 (1778); ? *Daubent. Pl. Enl.* 581. fig. 2 (1778).
? Motacilla salicaria, *Linn. Syst. Nat.* i. p. 330 (1766); *Bechst. Naturg. Deutschl.* iv. p. 671 (1795).
Motacilla arundinacea, *Lightfoot, Phil. Trans.* lxxv. p. 11 (1785); *Gmel. Syst. Nat.* i. p. 992 (1788, *ex Lightfoot*).
Reed Wren, *Lath. Gen. Syn. Suppl.* i. p. 184 (1787).
Sylvia arundinacea (*Gmel.*), *Lath. Ind. Orn.* ii. p. 510 (1790); *Bechst. Orn. Taschenb.* p. 174 (1802); *Wolf, Taschenb.* i. p. 235 (1810); *Leach, Cat. Mamm. &c. Brit. Mus.* p. 23 (1816); *Temm.*

* It being impossible to determine to what bird Linnæus intended to apply his name of *Motacilla salicaria*, which has been identified with many other species, and the *Turdus arundinaceus* of Linnæus having been removed to the genus *Acrocephalus*, and the name extensively applied to the Great Sedge-Warbler, we must unfortunately ignore the latter familiar name in favour of that of Vieillot, which appears to be the earliest untainted name.

Man. d'Orn. i. p. 191 (1820); *Naum. Vög. Deutschl.* iii. p. 614 (1823); *Jenyns, Man. Brit. Vertebr.* p. 107 (1835); *Temm. Man. d'Orn.* iii. p. 115 (1835); *Crespon, Orn. Gard.* p. 115 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 142 (1840); *Werner, Atlas, Insectiv.* pl. 30 (1842); *Kjærb. Danm. Fugle*, p. 165 (1852); *Sundev. Sv. Fogl.* p. 69 (1856); *Fallon, Ois. Belg.* p. 49 (1875).

Acrocephalus arundinaceus (*Gmel.*), *Naum. Nat. Land- u. Wass.-Vög. nördl. Deutschl., Nachtr.* Heft iv. p. 202 (1811); *Salvad. Faun. Ital. Ucc.* p. 112 (1871).

Muscipeta arundinacea (*Gmel.*), *Koch, Syst. baier. Zool.* i. p. 165 (1816).

Sylvia strepera, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 182 (1817); *Vieill. Faune Franç.* i. p. 219 (1820); *Roux, Orn. Prov.* i. p. 347 (1825).

Calamoherpe arundinacea (*Gmel.*), *Boie, Isis*, 1822, p. 552; *Bp. Comp. List B. Eur. & N. Amer.* p. 13 (1838); *Macgill. Br. B.* ii. p. 395 (1839); *Selys-Longch. Faun. Belg.* p. 101 (1842); *Schl. Vog. Nederl.* p. 143 (1854); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 259 (1859); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 516 (1867); *Loche, Expl. Sci. Algér., Ois.* p. 258 (1867); *Doderl. Avif. Sicil.* p. 124 (1869); *Droste, Vogelw. Borkum*, p. 101 (1869); *Shelley, B. Egypt*, p. 94 (1872); *Gould, B. Gt. Br.* ii. pl. lxxiii. (1873).

Curruca arundinacea (*Gmel.*), *Fleming, Brit. An.* p. 69 (1829).

Calamoherpe alnorum, *Brehm, Vög. Deutsch.* p. 443 (1831).

Calamoherpe arbustorum, *Brehm, op. cit.* p. 443 (1831).

Calamoherpe piscinarum, *Brehm, op. cit.* p. 447 (1831).

Calamoherpe brehmii, *Müller, fide Brehm, op. cit.* p. 447 (1831).

Curruca fusca, *Hempr. et Ehr. Symb. Phys., Aves*, fol. cc (1833).

Salicaria arundinacea (*Gmel.*), *Selby, Brit. Orn.* i. p. 203 (1833); *Gould, B. Eur.* ii. pl. 108 (1837); *Keys. u. Blas. Wirb. Eur.* pp. liii, 181 (1840); *Thomps. B. Irel.* i. p. 183 (1849); *Linderm. Vög. Griechenl.* p. 88 (1860).

Calamodyta strepera (*Vieill.*), *Gray, Gen. B.* i. p. 172 (1848).

Sylvia affinis, *Hardy, Ann. de l'Assoc. Norm.* 1841, *fide Degl. Orn. Eur.* i. p. 572 (1849, *nec Blyth*).

Calamoherpe pinetorum, *Brehm, Vogelf.* p. 235 (1855).

Calamoherpe hydrophilos, *Brehm, Vogelf.* p. 235 (1855).

Calamoherpe orientalis, *Brehm, Vogelf.* p. 235 (1855).

Calamoherpe crassirostris, *Brehm, Vogelf.* p. 235 (1855).

Calamoherpe obscurocapilla, *Dubois, Journ. Orn.* 1856, p. 240.

Calamodyta arundinacea (*Gmel.*), *Gray, Hand-l. B.* i. p. 208. no. 2940 (1869).

Calamodyta (Calamoherpe) arundinacea (*Gmel.*), *Fritsch, Vög. Eur.* p. 151 (1870).

Salicaria strepera, *Harting, Handb. Br. B.* p. 14 (1872).

Acrocephalus streperus (*Vieill.*), *Newt. ed. Yarr. Br. B.* i. p. 369 (1873); *Blanf. East. Pers.* ii. p. 196 (1876); *Dresser, B. Eur.* pt. lvii. (1877).

This species exactly resembles the preceding, except that the plumage of both the upper and under parts is distinctly suffused with rufous, which is especially pronounced on the rump and upper tail-coverts, and considerably so on the breast, flanks, and under tail-coverts. The legs, feet, and claws are slaty brown. Length of wing 2·7 to 2·35 inches, tail 2·3 to 1·95, culmen 0·7 to 0·6. The second primary is generally equal to the fourth, occasionally a trifle longer or a trifle shorter.

The Reed-Warbler breeds in Central and Southern Europe, extending its range eastwards as far as Turkestan and Baluchistan. It is said to pass through Egypt and Nubia on migration, and winters in Africa.

a. Ad. st.	England.	
b–m. ♂ ♀ ad. et juv. sk.	Cookham, Berks, July.	R. B. Sharpe, Esq. [P.].
n, *o*, *p*. Ad. st.	Cambridgeshire.	Mr. J. Baker.
q, *r*. Ad. sk.	Cambridgeshire, June 14, 1856 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
s, *t*. ♂ ad. sk.	Europe.	Purchased.
u. Ad. sk.	Europe.	Baron De Selys-Longchamps.
v. Ad. st.	France.	R. B. Sharpe, Esq. [P.].
w. ♀ ad. sk.	Gibraltar.	Col. Irby [P.].
x. Ad. sk.	Constantinople (*Elwes*).	F. Godman and O. Salvin, Esqrs. [P.].
y. ♂ ad. sk.	Gennesareth, Palestine.	Canon Tristram [C.].
z. ♀ ad. sk.	Banias, Palestine.	Canon Tristram [C.].
a'. ♂ ad. sk.	Bampur, Baluchistan, 2000 feet, April 7.	W. T. Blanford, Esq. [C.].
b'. ♂ ad. sk.	Kohrud, N. of Ispahan, 8000 feet, July 18.	W. T. Blanford, Esq. [C.].
c'. Skel.	England.	Purchased.

13. Acrocephalus dumetorum.

Sylvia montana, *Sykes, P. Z. S.* 1832, p. 89 (*nec Horsfield*).

Sylvia arundinacea (*Gmel.*), *apud Eversm. Add. Pall. Zoogr. Rosso-Asiat.* fasc. iii. p. 11 (1842).

Salicaria arundinacea ?, *Hodgs. MS. Drawings* (*in the Brit. Mus.*) *of B. of Nepal, Passeres*, pl. 52, *undè*

Salicaria arundinacea ?, *Hodgs. Gray's Zool. Misc.* no. 818, p. 82 (1844); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Severtz. Stray Feath.* 1875, p. 425.

Acrocephalus montanus (*Sykes*), *Blyth, J. A. S. Beng.* xiv. p. 594 (1845, *nec Horsfield*); *id. Cat. B. Mus. As. Soc.* p. 181 (1849).

Acrocephalus dumetorum, *Blyth, J. A. S. Beng.* xviii. p. 815 (1849); *id. Cat. B. Mus. As. Soc.* p. 326 (1849); *Layard, Ann. Nat. Hist.* 1853, p. 263; *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 332 (1854); *Jerd. B. Ind.* ii. p. 155 (1863); *Dresser, B. Eur.* pt. liii. (1876).

Sylvia (Salicaria) magnirostris, *Lilljeb. Öfv. Vet.-Ak. Handl.* 1850, p. 274, pl. xix.

Calamodyta dumetorum (*Blyth*), *Gray, Hand-l. B.* i. p. 207. no. 2923 (1869).

Calamoherpe (Salicaria) magnirostris (*Lilljeb.*), *Meves, Öfv. Vet.-Ak. Förh.* 1871, p. 752.

Salicaria eurhyncha, *Severtz. Turkest. Jevotn.* pp. 66, 128 (1873); *Severtz. Stray Feath.* 1875, p. 425; *Dresser, Ibis*, 1876, p. 85.

Salicaria sphenura, *Severtz. Turkest. Jevotn.* pp. 66, 128 (1873); *Severtz. Stray Feath.* 1875, p. 425; *Dresser, Ibis*, 1876, p. 86.

Salicaria concolor, *Severtz. Turkest. Jevotn.* pp. 66, 130 (1873); *Severtz. Stray Feath.* 1875, p. 426; *Dresser, Ibis*, 1876, p. 88.

Acrocephalus streperus (*Vieill.*), *apud Dresser, Ibis*, 1876, p. 83.

The general colour of the upper parts varies from olive-brown in

spring plumage to a faded olive-brown in summer, with a decidedly fulvous tinge after the autumn moult; eye-stripe nearly obsolete; wing-coverts and innermost secondaries very slightly browner, except towards the edge of the feathers; quills and tail-feathers a slightly darker brown, with narrow edges to the outside webs of the same colour as the back; quills and tail-feathers when fresh-moulted with narrow pale edges at and near the tips, but these are soon lost by abrasion; the breast, flanks, and thighs are brownish buff, shading into pale buffish white on the chin, throat, and centre of belly, axillaries, under wing-coverts, and the inner margin of the quills. *After the autumn moult* the whole of the underparts are suffused with a pure delicate buff. The bill is Acrocephaline, the upper mandible dark and the under mandible pale; the rictal bristles are very slightly developed. The legs, feet, and claws are pale horn-colour. Length of wing 2·5 to 2·33 inches, tail 2·3 to 2·0, culmen 0·7 to 0·6. Third and fourth primaries nearly equal and longest; second primary always shorter than the fifth, usually between the sixth and seventh, but occasionally shorter than the seventh.

Blyth's Reed-Warbler breeds in the Central Palæarctic Region, from St. Petersburg eastwards at least as far as the valley of the Yenesay. It also breeds in the Himalayas from Cashmere to Nepal, wintering in India as far south as Ceylon. It does not appear to have been observed in the Burma peninsula.

a. ♂ ad. sk.	Ekaterinburg (*Sabanäeff*).	H. E. Dresser, Esq. [P.].
b, *c*. Ad. sk.	N.W. India.	Capt. Stackhouse Pinwill [P.].
d, *e*, *f*. Ad. sk.	India.	India Museum.
g. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
	(Type of No. 818 Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres, pl. 52.)	
h, *i*. Ad. sk.	Nepal (*Hodgson*).	India Museum.
k. Ad. sk.	Bengal (*A. S. Beng.*).	India Museum.
l. Ad. sk.	Deccan (*Sykes*).	India Museum.
m. ♂ ad. sk.	Mynall, Travancore, Feb. 6, 1880.	F. W. Bourdillon, Esq. [C.].
n. Ad. sk.	Ceylon (*C. L. Layard*).	H. Cuming, Esq.

14. Acrocephalus agricola.

Sylvia (Acrocephalus) agricola, *Jerd. Madras Journ.* xiii. pt. 2, p. 131 (1844).

—— ?, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, App. pl. 38. no. 903.

Calamoherpe agricola (*Jerd.*), *Blyth, J. A. S. Beng.* xiv. p. 595 (1845); *Bp. Consp.* i. p. 285 (1850).

Calamodyta agricola (*Jerd.*), *Gray, Gen. B.* i. p. 172 (1848); *Gray, Hand-l. B.* i. p. 207. no. 2921 (1869).

Acrocephalus agricola (*Jerd.*), *Blyth, Cat. B. Mus. As. Soc.* p. 182 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 334 (1854); *Jerdon, B. Ind.* ii. p. 156 (1863); *Dresser, B. Eur.* pt. liii. (1876).

Salicaria capistrata, *Severtz. Turkest. Jevotn.* pp. 66, 127 (1873); *Severtz. Stray Feath.* 1875, p. 425; *Dresser, Ibis*, 1876, p. 84.

Salicaria modesta, *Severtz. Turkest. Jevotn.* pp. 66, 129 (1873); *Severtz. Stray Feath.* 1875, p. 426; *Dresser, Ibis*, 1876, p. 88.
Salicaria gracilis, *Severtz. Turkest. Jevotn.* pp. 66, 130 (1873); *Severtz. Stray Feath.* 1875, p. 426; *Dresser, Ibis*, 1876, p. 86.

The general colour of the upper parts varies from russet-brown in spring to almost an earthy brown in summer, becoming still more rufous after the autumn moult; eye-stripe very narrow, and becoming very obscure behind the eye; wing-coverts, innermost secondaries, quills, and tail-feathers browner, edged on the outside webs with the same colour as the back; quills and tail-feathers when fresh-moulted with narrow pale edges at and near the tips, which are soon lost by abrasion. In spring the underparts are pale buff, darkest on the breast, flanks, and thighs; on the three latter parts some buff is always retained, but the rest of the underparts fade in summer to nearly pure white; *after the autumn moult* the buff of the underparts is richer and purer in colour than in spring. Bill almost as slender as in *Phylloscopus*; upper mandible dark, under mandible pale, darker towards the tip; rictal bristles moderately developed. Legs, feet, and claws pale horn-colour. Length of wing 2·35 to 2·0 inches, tail about the same, culmen 0·56 to 0·52. Fourth primary longest; second primary equal to the seventh, sometimes a trifle shorter, sometimes a trifle longer; bastard primary slightly longer than in typical *Acrocephalus*, in adult birds as long as the primary-coverts, in birds of the year projecting 0·15 inch beyond them.

The most characteristic features of this species are its small bill and long tail.

Jerdon's Reed-Warbler breeds in the valley of the Lower Volga, extending its range eastwards in the Palæarctic Region at least as far as Turkestan, and probably as far as China. It also breeds in the Himalayas from Cashmere to Nepal, and winters in the plains of India.

a. Ad. sk. Madras. T. C. Jerdon, Esq. [P.].
(Type of *Acrocephalus agricola*, Jerdon.)
b. Ad. sk. Nepal. B. H. Hodgson, Esq. [P.].
(Type of No. 903 Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres, App. pl. 38.)
c. Ad. sk. Pushut, Afghanistan (*Griffith*). India Museum.

15. Acrocephalus bæticatus.

L'Isabelle, *Levaill. Ois. d'Afr.* iii. pl. 121. fig. 2 (1802).
Sylvia bæticata, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 195 (1817).
Salicaria rufescens, *Keys. u. Blas. Wirb. Eur.* p. liv (1840).
Calamodyta bæticula, *Vieill., fide Gray, Gen. B.* i. p. 172 (1848).
Calamodyta rufescens (*Keys. u. Blas.*), *Gray, Gen. B.* i. p. 172 (1848); *Layard, B. S. Afr.* p. 97 (1867); *Gray, Hand-l. B.* i. p. 207. no. 2929 (1869).
Calamoherpe rufescens (*Keys. u. Blas.*), *Bp. Consp.* i. p. 286 (1850); *Grill, Zool. Anteckn.* p. 28 (1859); *Ayres, Ibis*, 1869, p. 291.

Calamoherpe bæticula (*Vieill.*), *fide Bp. Consp.* i. p. 286 (1850).
Sylvia isabella, *Boie, fide Bp. Consp.* i. p. 286 (1850).
Cettia bæticula (*Vieill.*), *fide Sund. K. Sv. Vet.-Ak. Handl.* 1857, p. 38.
Calamoherpe arundinacea? (*Linn.*), *apud Gurney, Ibis*, 1865, p. 266.
Sylvia bæticula (*Vieill.*), *fide Layard, B. S. Afr.* p. 97 (1867).
Calamoherpe strepera (*Vieill.*), *apud Gurney, Ibis*, 1868, p. 157.
Calamodyta bæticata (*Vieill.*), *Gray, Hand-l. B.* i. p. 209. no. 2955 (1869); *Gurney, Anderss. B. Dam. Ld.* p. 99 (1872).
Calamoherpe bæticata (*Vieill.*), *Sharpe, Cat. Afr. B.* p. 32 (1871).
Acrocephalus bæticatus (*Vieill.*), *Sharpe, ed. Layard's B. S. Afr.* p. 290 (1877); *Ayres, Ibis*, 1878, p. 288.
Acrocephalus albotorquatus, *Hartlaub, Journ. Orn.* 1880, p. 212.

The general colour of the upper parts varies from a rich russet-brown, darkest on the head and palest on the rump; *in spring and autumn plumage* to a faded earthy brown, with little or no russet left except on the rump in summer and winter; eye-stripe nearly obsolete; quills and tail-feathers a darker brown than in the preceding species, but the variations in the detail of their coloration, as well as those of the underparts, the same; the bill the same as in the last species, but the legs, feet, and claws darker, pale ash-colour. Length of wing 2·48 to 2·18 inches, tail 2·2 to 2·0, culmen 0·67 to 0·6. Third and fourth primaries nearly equal and longest; second primary equal to the seventh, sometimes a trifle shorter, sometimes a trifle longer.

This species is an African form of the preceding, and differs from it only in having the upper parts of a more decided coffee-brown, and in being slightly smaller in size.

The South-African Reed-Warbler appears to be confined to Central and South Africa, breeding in the Transvaal and Damara Land, and probably remaining there during the whole year. Hartlaub's bird from Lado, Central Africa, appears to be a partial albino of the species.

a–h. Ad. sk.	S. Africa.	Sir A. Smith [P.].
i, k. ♂ ad. sk.	Otjimbinque, Damara Land Dec. (*Andersson*).	R. B. Sharpe, Esq.
l, m. ♀ ad. sk.	Swakop R., Damara Land Dec. (*Andersson*).	R. B. Sharpe, Esq. [P.].
n. ♂ ad. sk.	Transvaal (*Ayres*).	R. B. Sharpe, Esq.
o. Ad. sk.	S. Africa (*Layard*).	R. B. Sharpe, Esq.

5. LOCUSTELLA.

	Type.
Locustella, *Kaup, Natürl. Syst.* p. 115 (1829)	L. locustella.
Potamodus, *Kaup, Natürl Syst.* p 123 (1829)	L. fluviatilis.
Salicaria, *Selby, Brit. Orn.* p. 197 (1833, *partim*)	L. locustella.
Pseudo-luscinia, *Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838)	L. luscinioides.
Sibillatrix, *Macgill. Br. B.* ii. p. 399 (1839, *nec Kaup*, 1829)	L. locustella.
Lusciniopsis, *Bp. Uce. Eur.* p. 36 (1842)	L. luscinioides.

	Type.
Psithyrædus, *Gloger, Gem. Handb. Naturg.* p. 298 (1842)	L. locustella.
Parnopia, *Blasius, Newt. List B. Eur. Blas.* p. 11 (1862)	L. locustella.
Acridiornis, *Severtz. Turkest. Jevotn.* p. 66 (1873)	L. locustella.
Threnetria, *Schauer, Journ. Orn.* 1873, p. 161	L. locustella.

The genus *Locustella* comprises the Grasshopper Warblers, a small but well-defined group of birds nearly allied to *Acrocephalus*, agreeing with this genus in having 12 tail-feathers, the tarsus scutellated in front, and the bastard primary so minute as rarely to extend beyond the primary-coverts. It differs from *Acrocephalus* in having a more rounded tail, and nearly obsolete rictal bristles. The outside tail-feathers are shorter than the under tail-coverts, except in one instance, where, however, they are less than three fourths the length of the longest. The bill is long and slender, as in the *Calamodine* group of *Acrocephalus*, which many of the species further resemble in having the upper parts spotted. The predominant colours are russet-brown and olive-brown.

These birds are all migratory and moult twice in the year. So far as is known, all the species have the continuous monotonous note, which can scarcely be called a song, and which has given them the name of Grasshopper Warblers.

Three of the species breed in Central Europe, and winter in North Africa; a fourth breeds in Western Siberia, and winters in India; a fifth breeds in Eastern Siberia, and winters in India, Burmah, and the Malay archipelago; a sixth also breeds in Eastern Siberia, and a seventh on the eastern shores of the Pacific—both these latter wintering in the islands of the Malay archipelago.

Key to the Species.

A. Upper parts nearly uniform in colour; under surface of tail-feathers nearly uniform in colour. (Subgeneric group POTAMODI.)

a. Culmen more than 0·65 inch long. Under tail-coverts not quite so long as the outside tail-feathers ..... *fasciolata*, p. 109.

b. Culmen less than 0·65 inch long. Under tail-coverts longer than the outside tail-feathers.

a'. Upper parts olive-brown; breast striated .. *fluviatilis*, p. 110.

b'. Upper parts russet-brown; no striations on breast ..... *luscinioides*, p. 11[illegible]

B. Upper parts generally spotted like a Lark; if unspotted, or nearly so, under surface of tail-feathers with a subterminal black bar and pale tip. (Subgeneric group LOCUSTELLÆ.)

c. Tail-feathers with a subterminal black bar and pale tip.

c'. Upper parts with very indistinct darker centres to the feathers, sometimes obsolete. *ochotensis*, p. 113.

J.G.Keulemans del. Mintern Bros. imp.

Locustella fasciolata.

d'. Head and back with clearly-defined dark centres to the feathers ..... *certhiola*, p. 114.
d. Tail-feathers uniform in colour, but generally with obscure traces of transverse bars.
e'. Spots on the back obscurely defined. Second primary between the third and fourth, or fourth and fifth ..... *locustella*, p. 115.
f'. Spots on the back clearly defined.
a''. Upper parts brown with a shade of olive; underparts unspotted, except under tail-coverts, which have dark longitudinal central streaks. Second primary generally between the fourth and fifth, or fifth and sixth ..... *straminea*, p. 117.
b''. Upper parts brown, with a shade of russet; underparts varying from having every feather with a dark longitudinal central streak, to having no streaks on any of the feathers of the underparts. Second primary generally between the third and fourth ..... *lanceolata*, p. 118.

1. Locustella fasciolata. (Plate V.)

Acrocephalus fasciolatus, *Gray*, *P. Z. S.* 1860, p. 349; *Seebohm*, *P. Z. S.* 1877, p. 806; *Tweeddale*, *P. Z. S.* 1878, p. 430.
Acrocephalus insularis, *Wallace*, *Ibis*, 1862, p. 350.
Calamoherpe fumigata, *Swinhoe*, *P. Z. S.* 1863, pp. 91, 293.
Locustella fasciolata (*Gray*), *Blyth*, *Ibis*, 1867, p. 21; *Seebohm*, *Ibis*, 1879, p. 15.
Locustella insularis (*Wallace*), *Blyth*, *Ibis*, 1867, p. 21.
Calamodyta fumigata (*Swinh.*), *Gray*, *Hand-l. B.* i. p. 207. no. 2937 (1869).
Calamodyta fasciolata (*Gray*), *Gray*, *Hand-l. B.* i. p. 207. no. 2924 (1869); *Swinhoe*, *P. Z. S.* 1871, p. 352; *David et Oust. Ois. Chine*, p. 253 (1877).
Calamodyta insularis (*Wall.*), *Gray*, *Hand-l. B.* i. p. 207. no. 2925 (1869); *Swinhoe*, *P. Z. S.* 1871, p. 352; *David et Oust. Ois. Chine*, p. 253 (1877).
Calamoherpe subflavescens, *Elliot*, *P. Z. S.* 1870, p. 243.
Calamoherpe fasciolatus (*Gray*), *Tacz. Journ. Orn.* 1872, p. 353; *id. Bull. Soc. Zool. France*, p. 138 (1876).

The general colour of the upper parts is russet-brown, becoming slightly more rufous on the rump and upper tail-coverts, and shading into dark olive-brown on the nape and head; lores and the feathers behind the eye dark brown; eye-stripe pale ash-grey, very indistinct, and losing itself at the nape; wings and tail dark russet-brown, the outside webs of each feather edged with russet-brown; outside web of the second primary pale; chin, throat, and breast pale ash-grey, shading into nearly white on the centre of the belly, into olive-brown on the flanks and thighs, and into pale ochraceous brown on the under tail-coverts; axillaries and under wing-coverts pale russet-brown; inner margin of quills palish brown. Bill more slender and less wide at the base than in similar-sized *Acrocephali*;

upper mandible dark brown, under mandible pale horn-colour; rictal bristles obsolete. Wing rather long, flat, and pointed; third primary longest; second primary sometimes slightly longer, sometimes slightly shorter than the fourth; bastard primary very small, even in birds of the year shorter than the primary-coverts. Tail shorter than the wing, outside feathers 0·8 to 1·0 inch shorter than the longest, but slightly longer than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 3·2 to 2·9 inches, tail 3·0 to 2·6, culmen 0·8 to 0·7, tarsus 1·15 to 1·05.

In a *female* in my collection from Amoy, and in another from Hakodadi, the pale ash-grey on the chin, throat, and breast is replaced on the chin and upper throat by pale brownish white, shading into brown on the lower throat, which becomes more ochraceous on the breast. It is possible, however, that the fully adult female may be found to be similar to the male. *After the autumn moult* the ash-grey of the breast is less violet in colour. In *birds of the year* the whole of the plumage is suffused with yellow, causing the general colour of the upper parts to be more olive-brown than russet-brown, and the chin, throat, and centre of belly to be buffis yellow. In this plumage, which of course continues until the spring moult, becoming duller by the usual abrasion which takes place during the winter, it is the *A. fasciolatus* of Gray and the *C. subflavescens* of Elliot.

Gray's Grasshopper Warbler breeds in South-eastern Siberia, probably throughout the valley of the Amoor from Lake Baical to the Pacific and North Japan. It passes along the coast of China on migration, and winters in the islands of the Malay archipelago (Gilolo, Morty, Batchian, &c.).

a. ♂ juv. sk.	Batchian.	A. R. Wallace, Esq. [C.]. (Type of *Acrocephalus fasciolatus*, Gray.)
b, *c*. Juv. sk.	Batchian.	A. R. Wallace, Esq. [C.].
d. Ad. sk.	Gilolo.	A. R. Wallace, Esq. [C.]. (Type of *Acrocephalus insularis*, Wallace.)
e. Juv. sk.	Morty Is.	A. R. Wallace, Esq. [C.].
f, *g*. Ad. sk.	Morty Is.	A. R. Wallace, Esq. [C.].
h. Juv. sk.	Kaioa Is.	A. R. Wallace, Esq. [C.].

2. Locustella fluviatilis.

Sylvia fluviatilis, *Wolf, Taschenb.* i. p. 229 (1810); *Temm. Man. d'Orn.* i. p. 183 (1820); *Naum. Vög. Deutschl.* iii. p. 694 (1823); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 141 (1840); *Werner, Atlas, Insectiv.* pl. 25 (1842).

Acrocephalus stagnatilis, *Naum. Nat. Land- u. Wass.-Vög. nördl. Deutschl., Nachtr.* p. 202, pl. 26. figs. 2, 3 (1811).

Calamoherpe fluviatilis (*Wolf*), *Boie, Isis*, 1822, p. 552.

Potamodus fluviatilis (*Wolf*), *Kaup, Natürl. Syst.* p. 123 (1829).

Locustella fluviatilis (*Wolf*), *Gould, B. Eur.* ii. pl. 102 (1837); *Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838); *Dresser, B. Eur.* pt. xxxiv. (1875).

Salicaria fluviatilis (*Wolf*), *Keys. u. Blas. Wirb. Eur.* p. 180 (1840); *Schl. Rev. Crit.* p. xxviii (1844).

Lusciniopsis fluviatilis (*Wolf*), *Bp. Ucc. Eur.* p. 36 (1842); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 521 (1867); *Loche, Expl. Sci. Algér., Ois.* p. 266 (1867); *Salvad. Faun. Ital. Ucc.* p. 114 (1871).
Calamodyta fluviatilis (*Wolf*), *Gray, Gen. B.* i. p. 172 (1848); *Von Müller, Journ. Orn.* 1855, p. 198; *Gray, Hand-l. B.* i. p. 210. no. 2971 (1869).
Locustella strepitans, *Brehm, Vogelf.* p. 233 (1855).
Locustella wodzickii, *Brehm, Vogelf.* p. 234 (1855).
Lusciniopsis fluviatilis strepetans,
Lusciniopsis fluviatilis alticeps,
Lusciniopsis fluviatilis macrorhynchus,
Lusciniopsis fluviatilis macroura,
} *A. E. Brehm, Vers. Samml. C. L. Brehm*, p. 6 (1866).
Pseudoluscinia fluviatilis (*Wolf*), *Tristram, Ibis*, 1867, p. 77; *Shelley, B. Egypt*, p. 90 (1872).
Calamodyta (Lusciniopsis) fluviatilis (*Wolf*), *Fritsch, Vög. Eur.* p. 159 (1870).
Sylvia (Threnetria) fluviatilis (*Wolf*), *Schauer, Journ. Orn.* 1873, p. 161.
Threnetria gryllina, *Schauer, Journ. Orn.* 1873, p. 183.
Locustella cicada, *Hansmann, Journ. Orn.* 1873, p. 434.

General colour of the upper parts uniform dark olive-brown, very slightly more dusky on the wings, and very slightly paler on the margins of the innermost secondaries, and more so on the outside web of the second primary; a scarcely perceptible eye-stripe; lores and the feathers behind the eye uniform with the upper parts; generally obscure traces of transverse bars on the tail. The under-parts are greyish brown, shading somewhat abruptly into white on the throat, centre of belly, under wing-coverts, and the tips of the under tail-coverts; the feathers on the throat and fore neck have dark centres; axillaries and thighs pale brown; inner lining of quills pale grey. Bill typically Locustelline; upper mandible dark brown, under mandible pale horn-colour; rictal bristles scarcely perceptible. Wings very slightly concaved; second and third primaries nearly equal and longest; bastard primary very small, considerably shorter than the primary-coverts. Tail shorter than the wing, outside feathers 0·5 inch shorter than the longest, and shorter than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 2·96 to 2·7 inches, tail 2·5 to 2·3, culmen 0·6 to 0·54, tarsus 0·8.

It is not known that there is any difference in the colour of the plumage between the sexes, or that any change takes place during the autumn moult. *Birds of the year* are said to have the throat plain, without the dark centres; but I have been unable to obtain access to a skin in this plumage.

The River Grasshopper Warbler breeds in Russia as far north as Lake Ladoga, probably not extending its range westwards beyond the valley of the Danube. It is also supposed to breed in Asia Minor and Palestine, probably wintering in North Africa.

a. Ad. sk.	Europe.	Purchased.
b. Ad. st.	Europe.	Zoological Society.

3. Locustella luscinioides.

Sylvia luscinioides, *Savi, Nuovo Giornale de Letterati*, vii. p. 341 (1824); *Roux, Orn. Prov.* i. p. 325 (1825); *Temm. Man. d'Orn.* iii. p. 119 (1835); *Crespon, Orn. Gard.* p. 120 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 142 (1840); *Fallon, Ois. Belg.* p. 50 (1875).
Locustella luscinioides (*Savi*), *Gould, B. Eur.* ii. pl. 104 (1837); *Brehm, Vogelf.* p. 234 (1855); *Dresser, B. Eur.* pt. xxxviii. (1875).
Pseudoluscinia savii, *Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838).
Salicaria luscinioides (*Savi*), *Keys. u. Blas. Wirb. Eur.* pp. liii, 180 (1840); *Schl. Rev. Crit.* p. xxviii (1844); *Harting, Handb. Br. B.* p. 15 (1872).
Lusciniopsis savii (*Bp.*), *Bp. Ucc. Eur.* p. 36 (1842).
Calamodyta luscinioides (*Savi*), *Gray, Gen. B.* i. p. 172 (1848); *Gray, Hand-l. B.* i. p. 208. no. 2953 (1869).
Cettia luscinioides (*Savi*), *L. Gerbe, Dict. Univ. d'Hist. Nat.* xi. p. 240 (1848); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 251 (1859).
Calamoherpe luscinioides (*Savi*), *Schl. Vog. Nederl.* p. 149 (1854).
Lusciniola savii (*Bp.*), *Bp. Cat. Parzud.* p. 6 (1856); *Loche, Expl. Sci. Algér., Ois.* p. 265 (1867).
Locustella savii (*Bp.*), *Salvin, Ibis*, 1859, p. 356.
Lusciniopsis luscinioides (*Savi*), *Newt. List B. Eur. Blasius*, p. 1 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 520 (1867); *Doderl. Avif. Sicil.* p. 126 (1869); *Salvad. Faun. Ital. Ucc.* p. 114 (1871); *Gould, B. Gt. Br.* ii. p. lxxvii (1873).
Lusciniopsis luscinioides rufescens, *A. E. Brehm, Vers. Samml. C. L. Brehm*, p. 6 (1866).
Lusciniopsis luscinioides macrorhynchus, *A. E. Brehm, loc. cit.* (1866).
Lusciniopsis luscinioides brachyrhynchus, *A. E. Brehm, loc. cit.* (1866).
Calamodyta (Lusciniopsis) luscinioides (*Savi*), *Fritsch, Vög. Eur.* p. 160 (1870).
Pseudoluscinia luscinioides (*Savi*), *Shelley, B. Egypt*, p. 89 (1872).
Acrocephalus luscinioides (*Savi*), *Newt. ed. Yarr. Br. B.* i. p. 389 (1873).
Sylvia (Threnetria) luscinioides (*Savi*), *Schauer, Journ. Orn.* 1873, p. 161.
Threnetria acheta, *Schauer, Journ. Orn.* 1873, p. 183.
Potamodus luscinioides (*Savi*), *Blanf. East. Pers.* ii. p. 199 (1876).

General colour of the upper parts a uniform russet-brown, scarcely duskier on the quills, and somewhat paler on the outside web of the second primary; eye-stripe narrow and very obscure; lores and the feathers behind the eye russet-brown; generally obscure traces of transverse bars on the tail. Underparts pale buffish brown, shading into nearly white on the throat and centre of belly; axillaries, under wing-coverts, and obscure inner margin to the quills pale buffish brown; under tail-coverts pale chestnut, with obscure paler tips. Bill typically Locustelline; upper mandible dark brown, under mandible pale horn-colour; rictal bristles obsolete. Wings short, rather blunt, but not much concaved; second primary equal to or slightly longer than the third; bastard primary very small, and not extending beyond the primary-coverts, even in birds of the year. Tail shorter than the wing; outside feathers 0·6 to 0·7 inch shorter than the longest, and shorter than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 2·8 to 2·51 inches, tail 2·54 to 2·15, culmen 0·61 to 0·56, tarsus 0·9 to 0·85.

It is not known that the sexes differ in plumage, or that the autumn moult produces any change of colour. *Birds of the year* are said to be less rufous on the upper parts, and paler underneath.

Savi's Grasshopper Warbler appears to be sparingly distributed throughout Central and Southern Europe, including the British Islands. Eastwards it has been found as far as Palestine. It also breeds in some parts of the southern shores of the Mediterranean. It is said to be a resident in some parts of France, but probably the greater number migrate to North Africa for the winter.

a. Ad. sk.	Europe.	Purchased.
b. Ad. st.	Cambridgeshire.	Mr. J. Baker [C.].
c. Ad. sk.	Wicken Fen, Cambridgeshire, June 10, 1847.	F. Godman and O. Salvin, Esqrs. [P.].
d. Ad. sk.	Whittlesea Mere.	F. Godman and O. Salvin, Esqrs. [P.].
e, *f*. ♂ ♀ ad. sk.	Holland (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
g. ♂ ad. sk.	Near Gibraltar, May 7, 1874.	Col. Irby [P.].
h. Ad. sk.	Zana, Algeria (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].

4. Locustella ochotensis.

Sylvia (Locustella) certhiola (*Pall.*) *apud Midd. Sib. Reis.* ii. p. 184 (1853).
Sylvia (Locustella) ochotensis, *Midd. Sib. Reis.* ii. p. 185 (1853).
Lusciniopsis japonica, *Cassin, Proc. Ac. Sc. Phil.* 1858, p. 193.
Calamodyta ochotensis (*Midd.*), *Gray, Hand-l. B.* i. p. 210. no. 2973 (1869).
Locustella subcerthiola, *Swinhoe, Ibis*, 1874, p. 154; *David et Oust. Ois. Chine*, p. 249 (1877).
Arundinax blakistoni, *Swinhoe, Ibis*, 1876, p. 332 (*bird of the year*).

General colour of the upper parts a uniform russet-brown, with very obscure traces of paler edges to the feathers, which, however, become distinct on the wing-coverts and innermost secondaries; inside web of the second primary paler; eye-stripe very narrow and obscure; lores and the feathers behind the eye uniform with the upper parts; generally obscure traces of transverse bars on the tail; tail-feathers becoming darker towards the apex on the under surface, and finally tipped with greyish white. The chin, throat, and centre of belly nearly white, shading into pale buffish brown on the breast, flanks, and under tail-coverts; axillaries, under wing-coverts, and thighs pale buff; inner margin of quills pale ochraceous. Bill typically Locustelline; upper mandible dark brown, under mandible pale horn-colour; rictal bristles obsolete. Wing rather short and blunt, with the third primary longest; second primary equal in length to or a trifle longer than the fourth; bastard primary very small, never projecting beyond the primary-coverts. Tail shorter than the wing, the outside feathers 0·5 to 0·6 inch shorter than the longest, and shorter than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 2·75 to 2·66 inches, tail 2·35 to 2·2, culmen 0·7 to 0·6, tarsus 0·95.

There is no difference in the plumage of the sexes, nor is it known that there is any difference between spring and autumn plumage. In *birds of the year* the whole plumage is more or less suffused with yellow, causing the general colour of the upper parts to be a dark olive-brown, and the chin and centre of belly to be buffish yellow. In this plumage it is the *Arundinax blakistoni* of Swinhoe.

Middendorff's Grasshopper Warbler breeds in North-eastern Siberia and the Kurile Islands, passes through Japan on migration, and winters in the islands of the Malay archipelago.

a. Juv. sk.	Kurile Isles (*Wosnessensky*).	Prof. Brandt.
b. Ad. sk.	Lumbidan, Borneo.	Hugh Low, Esq. [C.].
c. Ad. sk.	Coast of N.E. Siberia (*H.M.S. 'Herald'*).	Capt. Kellett [P.].

5. Locustella certhiola.

Motacilla certhiola, *Pallas, Zoogr. Rosso-Asiat.* i. p. 509 (1811).
Sylvia certhiola (*Pall.*), *Temm. Man. d'Orn.* i. p. 186 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 83 (1822); *Temm. Man. d'Orn.* iii. p. 113 (1835); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 147 (1840); *Werner, Atlas, Insectiv.* pl. 27 (1842); *Schl. Rev. Crit.* p. 59 (1844).
Turdus certhiola (*Pall.*), *fide Temm. Man. d'Orn.* i. p. 187 (1820).
Calamoherpe certhiola (*Pall.*), *Boie, Isis*, 1822, p. 552.
Locustella certhiola (*Pall.*), *Gould, B. Eur.* ii. pl. 105 (1837); *Bp. Consp.* i. p. 280 (1850); *Swinhoe, P. Z. S.* 1871, p. 354; *David et Oust. Ois. Chine*, p. 248 (1877); *Dresser, B. Eur.* pt. lxviii. (1878).
Locustella rubescens, *Blyth, J. A. S. Beng.* xiv. p. 582 (1845); *Swinhoe, P. Z. S.* 1871, p. 354.
Calamodyta certhiola (*Pall.*), *Gray, Gen. B.* i. p. 172 (1848); *Gray, Hand-l. B.* i. p. 210. no. 2974 (1869); *Tacz. Journ. Orn.* 1872, p. 356; *Tacz. Bull. Soc. Zool. France*, 1876, p. 139.
Salicaria (Locustella) certhiola (*Pall.*), *Schrenck, Reis. u. Forsch. Amurl.* i. p. 372 (1860).
Sylvia (Calamoherpe) certhiola (*Pall.*), *Naum. Vög. Deutschl., Nachtr.* pt. 2, p. 91 (1860).
Parnopia certhiola (*Pall.*), *Newt. List B. Eur. Blasius*, p. 11 (1862).
Locustella temporalis, *Jerdon, B. Ind.* ii. p. 160 (1863).
Calamodyta doriæ, *Salvad. Atti R. Acc. Sc. Tor.* iii. p. 531 (1868); *Sharpe, Ibis*, 1876, p. 41, pl. ii. fig. 2.
Calamodyta rubescens (*Blyth*), *Gray, Hand-l. B.* i. p. 210. no. 2975 (1869); *Tacz. Journ. Orn.* 1872, p. 357.
Salicaria certhiola (*Pall.*), *Rey, Syn. eur. Vög.* p. 60 (1872).
Locustella minor, *David et Oust. Ois. Chine*, p. 250 (1877).

General colour of the upper parts russet-brown, greyer on the head, more tawny on the rump and upper tail-coverts, and much paler on the edges of the wing-coverts and innermost secondaries. In youngish adults each feather, except the quills, has a dark centre; in the tail-feathers the dark centre forms a large spot near the end, becoming narrower towards the rump, and is, in fact, a semiconfluent series of bars, becoming broader and less obscure towards the tip of the feather, where they are emphasized on all

but the two centre feathers by a nearly white apex. In older birds these dark subterminal spots on the rectrices become less conspicuous, and the dark centres to the feathers of the rump and upper tail-coverts disappear altogether. Inside web of the second primary paler; eye-stripe narrow and obscure; lores and the feathers behind the eye brown. The underparts are nearly white on the chin, throat, centre of belly, axillaries, and under wing-coverts, shading into buffish brown on the flanks and thighs, and into pale buffish brown on the breast and under tail-coverts, the latter having obscure white tips. Tail-feathers becoming darker towards the apex on the under surface, and finally tipped with greyish white. Bill typically Locustelline; upper mandible dark brown, under mandible pale horn-colour, darker towards the tip; rictal bristles obsolete. Wing with the third primary the longest, and the second intermediate in length between the fourth and fifth, in very rare cases between the third and fourth; bastard primary generally shorter than the primary-coverts, but in birds of the year sometimes extending 0·1 inch beyond them. Tail with the outside feather 0·65 inch shorter than the longest, and shorter than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 2·8 to 2·4 inches, tail 2·3 to 2·0, culmen 0·61 to 0·58, tarsus 0·9.

There is no difference in the plumage of the sexes. *After the autumn moult* the buffish brown of the underparts is deeper in tint, approaching chestnut-brown. *Birds of the year* have the underparts suffused with yellow, and many of the feathers of the throat have dark centres. The striation of the throat is seldom entirely lost after the first spring moult, and traces of striation are often met with on the flanks and the longest feathers of the under tail-coverts in apparently adult birds.

Pallas's Grasshopper Warbler breeds in Central and Eastern Siberia, passes through China on migration, and winters in India, Ceylon, the Burma peninsula, and the islands of the Malay archipelago. A straggler has been shot on Heligoland.

a, *b*. ♂ ad. sk.	Dauria, June 10, July 5.	Warsaw Museum [E.].
c. ♂ ad. sk.	Dauria, June 4 (*Dr. Dybowsky*).	R. B. Sharpe, Esq. [P.].
d. ♀ ad. sk.	Ceylon, Feb. 9.	Capt. Legge [P.].
e. ♂ ad. sk.	Sibu, Borneo, Nov. 21.	Alfred Everett, Esq. [C.].
f, *g*. Ad. sk.	Lumbidan, Borneo.	Gov. Ussher [C.].

6. Locustella locustella.

La Fauvette grise tachetée, *Briss. Orn.* vi. *Suppl.* p. 112 (1760).
The Grasshopper Lark, *Penn. Brit. Zool.* ii. p. 240 (1768).
La Fauvette tachetée, *Daubent. Pl. Enl.* 581. fig. 3 (1778).
La Locustelle, *Montb. Hist. Nat. Ois.* v. p. 328 (1778).
Motacilla nævia, *Bodd. Tabl. des Pl. Enl.* p. 35. no. 581 (1783).
Sylvia locustella, *Lath. Ind. Orn.* ii. p. 515 (1790); *Wolf, Taschenb.* i. p. 230 (1810); *Vieill. Faune Franç.* i. p. 226 (1820); *Temm. Man. d'Orn.* i. p. 184 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 82 (1822); *Naum. Vög. Deutschl.* iii. p. 701 (1823); *Roux,*

Orn. Prov. i. p. 351 (1825); *Jenyns, Man. Brit. Vertebr.* p. 106 (1835); *Temm. Man. d'Orn.* iii. p. 112 (1835); *Crespon, Orn. Gard.* p. 112 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 145 (1840); *Werner, Atlas, Insectiv.* pl. 26 (1842); *Kjærb. Danm. Fugle*, p. 170 (1852); *Sundev. Sv. Fogl.* p. 71 (1856); *Fallon, Ois. Belg.* p. 47 (1875).

Acrocephalus fluviatilis (*Wolf*), *apud Naum. Nat. Land- u. Wass.-Vög. nördl. Deutschl., Nachtr.* Heft iv. p. 202 (1811).

Muscipeta locustella (*Lath.*), *Koch, Syst. baier. Zool.* i. p. 166 (1816).

Muscipeta olivacea, *Koch, Syst. baier. Zool.* i. p. 167 (1816).

Calamoherpe locustella (*Lath.*), *Boie, Isis*, 1822, p. 552; *Brehm, Vög. Deutschl.* p. 439 (1831); *Selys-Longch. Faun. Belg.* p. 102 (1842); *Schl. Vog. Nederl.* p. 147 (1854).

Curruca locustella (*Lath.*), *Steph. Shaw's Gen. Zool.* xiii. pt. 2, p. 213 (1825); *Fleming, Brit. An.* p. 69 (1828).

Locustella locustella (*Lath.*), *Kaup, Natürl. Syst.* p. 115 (1829); *Droste, Vogelw. Borkum*, p. 100 (1869).

Calamoherpe tenuirostris, *Brehm, Vög. Deutschl.* p. 440 (1831).

Salicaria locustella (*Lath.*), *Selby, Brit. Orn.* p. 199 (1833); *Keys. u. Blas. Wirb. Eur.* pp. liv, 182 (1840); *Schl. Rev. Crit.* p. xxviii (1844); *Thomps. B. Irel.* i. p. 179 (1849); *Harting, Handb. Br. B.* p. 14 (1872).

Locustella sibilans, *Gould, B. Eur.* letterpress to pl. 102 (1837).

Locustella avicula, *Ray, fide Gould, B. Eur.* pl. 103 (1837); *Gould, B. Gt. Br.* ii. pl. lxxviii. (1873).

Locustella rayi, *Gould, fide Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838); *Salvad. Faun. Ital. Ucc.* p. 115 (1871).

Sibilatrix locustella (*Lath.*), *Macgill. Br. B.* ii. p. 399 (1839).

Psithyrædus locustella (*Lath.*), *Gloger, Gem. Handb. Naturg.* p. 298 (1842).

Locustella nævia (*Bodd.*), *Degl. Orn. Eur.* i. p. 589 (1849); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 257 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 528 (1867); *Doderl. Avif. Sicil.* p. 127 (1869); *Dresser, B. Eur.* pt. xxxi. (1874).

Locustella anthirostris, *Brehm, Naum.* p. 284 (1855).

Parnopia locustella (*Lath.*), *Newt. List B. Eur. Blasius*, p. 11 (1862).

Locustella vera major, *A. E. Brehm, Verz. Samml. C. L. Brehm*, p. 6 (1866).

Locustella vera fruticeti, *A. E. Brehm, loc. cit.* (1866).

Locustella vera tenuirostris, *A. E. Brehm, loc. cit.* (1866).

Locustella vera anthirostris, *A. E. Brehm, loc. cit.* (1866).

Calamodyta locustella (*Lath.*), *Gray, Hand-l. B.* i. p. 210. no. 2972 (1869): *Fritsch, Vög. Eur.* p. 157 (1870).

Acrocephalus nævius (*Bodd.*), *Newton, ed. Yarr. Br. B.* i. p. 384 (1873).

Sylvia (Threnetria) locustella (*Lath.*), *Schauer, Journ. Orn.* 1873, p. 161.

Threnetria locustella (*Lath.*), *Schauer, Journ. Orn.* 1873, p. 183.

General colour of the upper parts olive-brown, each feather having an obscure dark centre, which becomes nearly obsolete on the sides of the neck and on the longest upper tail-coverts; lores and the feathers behind the eye olive-brown; eye-stripe very narrow and indistinct, and soon losing itself behind the eye; quills and tail-feathers brown, the outside webs edged with olive-brown, most conspicuously so on the innermost secondaries; generally obscure traces

of transverse bars on the tail. Chin and centre of belly white, shading into buffish brown on the breast, flanks, thighs, and under tail-coverts, most of the latter have narrow dark-brown centres; axillaries and under wing-coverts pale buffish brown; inner margin of quills palish brown. Wing with the third primary longest, and the second slightly longer or slightly shorter than the fourth; bastard primary very small, rarely, if ever, extending beyond the primary-coverts. Bill typically Locustelline, indistinguishable from Phylloscopine, upper mandible dark, under mandible pale; rictal bristles obsolete. Tail generally shorter, but sometimes nearly as long as the wing; outside feathers 0·5 inch shorter than the longest, and shorter than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 2·6 to 2·27 inches, tail 2·4 to 1·95, culmen 0·58 to 0·51, tarsus 0·8.

The plumage of the sexes is alike. *After the autumn moult* the brown on the breast and flanks is darker, buffer, and more extended. In *birds of the year* the whole of the underparts are more or less suffused with yellow, and most of the feathers on the throat have dark centres. A slight tinge of yellow on the underparts, and some of the pectoral streaks, are frequently found in young birds after their first spring moult.

The Grasshopper Warbler is a summer migrant to Central and Southern Europe, not extending further north than the British Islands. It probably winters in North Africa, though it is said to be occasionally found in South Europe throughout the year.

a, b, c. Ad. sk.	Lincolnshire.	H. Seebohm, Esq. [P.].
d, e. Ad. st.	Cambridgeshire.	Mr. J. Baker [C.].
f. Ad. sk.	Cambridgeshire, June 3, 1856 (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
g, h. ♀ ad. sk.	Wicken Fen, Cambridgeshire, April 30, 1856 (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
i. ♂ ad. sk.	Wicken Fen, May 31, 1856 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
k, l. ♂ ad. sk.	Wicken Fen, July 11, 1856 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
m. Ad. sk.	Middlesex (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
n, o. Ad. st.	Wiltshire.	Col. Montagu [P.].
p. Ad. st.	Europe.	Baron Laugier.
q. Juv. sk.	Europe.	Baron Laugier.
r. ♀ ad., *s.* imm. sk.	Ria de Cubas, Santander, Spain, June 17, 1876.	Col. Irby [P.].
t. Skeleton.	Europe.	Purchased.

7. Locustella straminea.

Acridiornis straminea, *Severtz. Turkest. Jevotn.* p. 66 (1873).
Locustella lanceolata (*Temm.*), *apud Dresser, Ibis*, 1876, p. 90.
Locustella hendersoni (*Cass.*), *apud Hume, Str. F.* vi. p. 340 (1878).

General colour of the upper parts pale olivaceous brown, each feather having a well-defined dark-brown centre; lores and the feathers behind the eye olivaceous brown, obscurely streaked; eyelids pale; eye-stripe nearly obsolete; wings brown, the outside

webs edged with pale olivaceous brown; tail brown, the outside edges of the feathers paler, each feather having a broad, obscurely defined pale tip. Chin, throat, and centre of belly nearly white, shading into pale ochraceous brown on the breast and flanks, and into greyish white on the under tail-coverts; frequently a few obscure traces of spots on the lower throat, generally a few stripes on the flanks, and always well-defined dark-brown centres to the under tail-coverts; axillaries and under wing-coverts pale buff; inner margin of quills pale brown. Bill typically Locustelline, upper mandible dark brown, under mandible pale horn-colour; rictal bristles obsolete. Wings with the third primary longest; second primary in two skins between the third and fourth, in one equal to the fourth, in three between the fourth and fifth, in two equal to the fifth, and in two between the fifth and sixth; bastard primary very small, but occasionally extending slightly beyond the primary-coverts. Tail slightly shorter than the wing, the outside feathers 0·6 to 0·8 inch shorter than the longest, and shorter than the under tail-coverts. Legs, feet, and claws pale horn-colour. Length of wing 2·4 to 2·05 inches, tail 2·25 to 1·85, culmen 0·56 to 0·48, tarsus 0·75.

It is not known that the sexes differ in plumage. *After the autumn moult* the spots on the back are somewhat less clearly defined. *Birds of the year* appear to be unknown.

The Siberian Grasshopper Warbler is supposed to breed in South-western Siberia from the Ural Mountains to Turkestan, and to winter in the plains of India.

a. ♂ ad. sk. Etawah, N.W. India Mar. 24, 1870 (*Brooks*). Henry Seebohm, Esq. [P.].

8. Locustella lanceolata.

Sylvia lanceolata, *Temm. Man. d'Orn.* iv. p. 614 (1840); *Werner, Atlas, Insectiv. App.* pl. 10 (1842).
Cisticola lanceolata (*Temm.*), *Durazzo, Uce. Lig.* p. 35 (1840).
Salicaria lanceolata (*Temm.*), *Schleg. Rev. Crit.* p. xxx (1844).
Calamodyta lanceolata (*Temm.*), *Gray, Gen. B.* i. p. 172 (1848); *Bp. Consp.* i. p. 287 (1850); *Gray, Hand-l. B.* i. p. 210. no. 2970 (1869); *Fritsch, Vög. Eur.* p. 155 (1870).
Locustella lanceolata (*Temm.*), *Bp. Cat. Parzud.* p. 6 (1850); *Degl. et Gerbe, Orn. Eur.* i. p. 531 (1867); *Swinh. P. Z. S.* 1871, p. 354; *Walden, Ibis*, 1874, p. 139; *Dresser, B. Eur.* pt. xxxv. (1875); *Tacz. Bull. Soc. Zool. France*, p. 139 (1876); *David et Oust. Ois. Chine*, p. 251 (1877); *Hume, Str. F.* vi. p. 339 (1878).
Lusciniopsis hendersonii, *Cassin, Proc. Phil. Ac. Sci.* p. 194 (1858).
Salicaria locustella, var. lanceolata (*Temm.*), *Radde, Reis. Sibir., Vög.* p. 206 (1863).
Locustella minuta, *Swinh. P. Z. S.* 1863, p. 93.
Locustella macropus, *Swinh. P. Z. S.* 1863, p. 93.
Locustella hendersonii (*Cass.*), *apud Swinh. Ibis*, 1863, p. 444.
Calamodyta hendersonii (*Cass.*), *Gray, Hand-l. B.* i. p. 210. no. 2976 (1869).
Locustella subsignata, *Hume, Str. F.* i. p. 409 (1873).

General colour of the upper parts russet-brown, each feather having a well-defined dark-brown centre; lores and the feathers behind the eye russet-brown, obscurely streaked; eye-stripe nearly

obsolete; wings brown, the outside webs edged with russet-brown; tail brown, the outside webs edged with russet-brown, outside feathers with traces of pale tips; chin, throat, and centre of belly nearly white, shading into pale ochraceous brown on the breast, flanks, thighs, and under tail-coverts. Underparts more or less streaked as hereafter described; axillaries and under wing-coverts pale chestnut; inner margin of quills pale brown. Bill typically Locustelline; upper mandible dark brown, under mandible pale horn-colour; rictal bristles obsolete. Wings with the third primary longest; second primary generally intermediate in length between the third and fourth, in rare instances between the fourth and fifth; bastard primary very small, extending about as far as the primary-coverts. Tail shorter than the wing, the outside feathers 0·6 to 0·7 inch shorter than the longest, and shorter than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 2·25 to 2·0 inches, tail 2·0 to 1·65, culmen 0·5 to 0·44, tarsus 0·78 to 0·7.

It is not known that there is any difference in the plumage of the sexes. *After the autumn moult* no important change of colour is observable. *Birds of the year* have the whole of the underparts suffused with greyish yellow.

The dark-brown streaks in the centre of the feathers in the underparts vary as follows:—

L. macropus (Swinh.).—The type, in my collection, from Amoy, in China (May 31), has no streaks whatever on the underparts, except a few very obscure ones on the flanks, and the slightest possible traces on the throat.

L. minuta (Swinh.).—The type, in my collection, from Amoy and a second skin from Canton agree in having the sides of the throat, the breast, and flanks conspicuously streaked. In the Amoy skin, which appears to be adult, a few of the basal under tail-coverts are also very obscurely streaked; but in the Canton skin, which, from the tint of yellow which pervades the underparts, I take to be a bird of the year, the whole of the under tail-coverts are conspicuously streaked.

L. lanceolata (Temm.).—A skin, in my collection, from Lake Baical, which the yellowness of the underparts induces me to believe is that of a bird of the year, has the throat and breast distinctly streaked, and a few obscure streaks on the flanks and the basal under tail-coverts. A skin from Lake Baical and another from Cheefoo have the whole of the underparts conspicuously streaked, except the chin, the centre of the belly, and the longer under tail-coverts, and agree with Meves's description of skins from Lake Ladoga. Two skins from Lake Baical and one from Cheefoo have the whole of the under tail-coverts as conspicuously streaked as the throat, breast, and flanks, and agree with descriptions of skins from Europe and Hume's descriptions of skins from the South-Andaman Islands.

The variation in size appears to be about the same in all these forms.

At present, with the scanty material at command, it seems impossible to determine which, if any, of these forms should be considered specific. I think that *L. straminea* is unquestionably de-

serving of specific rank, and that *L. macropus*, *L. minutus*, and *L. lanceolata* will be found to be one species, which, like *Acrocephalus aquaticus*, is sometimes much streaked on the underparts, and sometimes scarcely at all so, but whether these variations are subspecific, or are due to age, sex, or season, I do not know.

Temminck's Grasshopper Warbler appears to breed near St. Petersburg, and probably eastwards in suitable localities as far as Turkestan, Lake Baical, and the Amoor. It passes through China on migration, and winters in the Burma peninsula, the Andaman Islands, and possibly in some of the islands of the Malay archipelago.

6. LUSCINIOLA.

	Type.
Lusciniola, *Gray, List Gen. B.* p. 28 (1841)	L. melanopogon.
Phragamaticola, *Jerdon, Madras Journ.* xiii. pt. 2, p. 129 (1844, *ex Blyth MS., descr. null.*)	L. aedon.
Tribura, *Hodgs. P. Z. S.* 1845, p. 30	L. luteiventris.
Dumeticola, *Blyth, J. A. S. Beng.* xiv. pt. 2, p. 583 (1845)	L. thoracica.
Arundinax, *Blyth, J. A. S. Beng.* xiv. pt. 2, p. 595 (1845)	L. aedon.
Herbivocula, *Swinhoe, P. Z. S.* 1871, p. 354.....	L. schwarzi.
Oreopneuste, *Swinhoe, P. Z. S.* 1871, p. 355.....	L. armandi.

The genus *Lusciniola* comprises a small group of aquatic Warblers in which the tarsus is more or less distinctly scutellated in front. The tail consists of twelve feathers, and is generally considerably rounded, the outside feathers being in many species only from three fifths to four fifths the length of the longest. The wing is rather short and slightly concaved. The bastard primary is always much longer than the primary-coverts, but never much more than half the length of the second primary. The predominant colours are russet-brown and olive-brown, with a shade of ash-grey on the breast in adult plumage of some species.

This genus may almost be considered a Himalayan one, seven species being represented there in the breeding-season, one of which also extends its range to South-east Siberia and North China, where four other species breed. Westwards the genus is represented by a single species extending from Persia to the basin of the Mediterranean; whilst the thirteenth species appears to have become isolated in South Africa.

Key to the Species.

A. Bill short and thick, and wide at the base. Rictal bristles well developed. Outside tail-feathers 1·0 to 0·7 inch shorter than the longest. (Subgeneric group ARUNDINACES.)
  a. Tail longer than wing ..... *aedon*, p. 121.
B. Bill long and slender, not very wide at the base; rictal bristles small. Outside tail-feathers 0·7 to 0·4 inch shorter than the longest. (Subgeneric group LUSCINIOLÆ.)
  b. Larger. Upper parts nearly uniform brown. *gracilirostris*, p. 122.
  c. Smaller. Head nearly black; feathers of back with obscure dark centres ..... *melanopogon*, p. 132.

C. Bill long and slender; rictal bristles obsolete. Outside tail-feathers 1·0 to 0·5 inch shorter than the longest. (Subgeneric group DUMETICOLÆ.)
d. Tail longer than the wing.
a'. Culmen 0·7 to 0·62 inch. Under mandible nearly black. Bastard primary less than half the length of the second .. *major*, p. 124.
b'. Culmen 0·51 to 0·5 inch. Under mandible pale horn-colour. Bastard primary half the length of the second ..... *luteiventris*, p. 125.
e. Tail shorter than the wing.
c'. Outside tail-feathers 0·8 to 0·9 inch shorter than the longest. Axillaries greyish white ..... *thoracica*, p. 124.
d'. Outside tail-feathers 0·5 inch shorter than longest. Axillaries pale buffish yellow ..... *flaviventris*, p. 131.
D. Bill moderately long and generally slender; rictal bristles fairly developed. Outside tail-feathers 0·2 to 0·1 inch shorter than the longest. (Subgeneric group HERBIVOCULÆ.)
f. Bill short and thick, and wide at the base. Second primary about equal to the eighth. *schwarzi*, p. 128.
g. Bill moderately long and slender.
e'. Axillaries and under wing-coverts buff.
a''. Upper parts earthy brown; eye-stripe pale buff. Underparts shading from buff to white ..... *fuscata*, p. 127.
b''. Upper parts earthy brown; eye-stripe bright yellow. Underparts shading from dark buffish yellow to pale buffish yellow ..... *indica*, p. 126.
c''. Upper parts russet-brown; eye-stripe pale buff. Underparts shading from yellowish buff to yellowish white..... *armandi*, p. 130.
d''. Upper parts dark olive-brown; eye-stripe pale olive-brown and very obscure. Underparts shading from dark yellowish olive to light yellowish olive ..... *fuliginiventris*, p. 129.
f'. Axillaries and under wing-coverts white.
e''. Length of wing 2·05 to 1·95 inch. The whole of the underparts ashy white..... *neglecta*, p. 131.

1. Lusciniola aedon.

Muscicapa aedon, *Pall. Reis. Russ. Reichs*, iii. p. 695 (1776).
Turdus aedon (*Pall.*), *Pallas, Zoogr. Rosso-Asiat.* i. p. 459 (1811).
Phragamaticola olivacea, *Jerd. Madras Journ.* xiii. pt. ii. p. 129 (1844, *ex Blyth MS., descr. null.*).
Arundinax olivaceus, *Blyth, J. A. S. Beng.* xiv. p. 595 (1845); *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Appendix*, pl. 39. no. 930 (*circ.* 1846); *Bp. Consp.* i. p. 287 (1850); *Blyth, P. Z. S.* 1862, p. 316; *Jerd. B. Ind.* ii. p. 157 (1863).
Salicaria (Calamoherpe) aedon (*Pall.*), *Schrenck, Reis. u. Forsch. Amurl.* i. p. 367 (1860).

Calamoherpe aedon (*Pall.*), *Swinhoe, P. Z. S.* 1863, p. 294.
Salicaria aedon (*Pall.*), *Dybow. u. Parrex, Journ. Orn.* 1868, p. 333.
Calamodyta aedon (*Pall.*), *Gray, Hand-l. B.* i. p. 208. no. 2939(1869).
Arundinax aedon (*Pall.*), *Swinhoe, P. Z. S.* 1871, p. 353; *Tacz. Journ. Orn.* 1872, p. 353; *Walden, Ibis*, 1873, p. 307; *Blyth & Walden, B. Burm.* p. 104 (1875); *Tacz. Bull. Soc. Zool. France*, ii. p. 137 (1876); *Prjev. Roucley's Orn. Misc.* 1877, p. 169; *David et Oust. Ois. Chine*, p. 254 (1877).

General colour of the upper parts olive-brown, slightly paler on the rump and upper tail-coverts; lores pale buffish brown; no eye-stripe; wings and tail brown; all the wing-coverts and quills narrowly edged with pale olive-brown on the outside webs. Under-parts pale buffish white, shading into pale buff on the breast, flanks, thighs, and under tail-coverts; axillaries and under wing-coverts buff; inner margin of quills pale buffish brown. Bill short and thick, but wide at base; upper mandible dark brown, under mandible pale horn-colour; rictal bristles well developed. Wing rather short and blunt; third and fourth primaries nearly equal and longest; second primary generally intermediate in length between the seventh and eighth, occasionally longer than the seventh; bastard primary 0·8 to 0·9 inch. Tail longer than the wing, the outside feathers from 0·7 to 1·0 inch shorter than the longest. Legs, feet, and claws brown. Length of wing 3·3 to 3·0 inches, tail 3·5 to 3·1, culmen 0·8 to 0·7, tarsus 1·15 to 1·05.

The *female* does not appear to differ from the male. *After the autumn moult* both the upper and under parts are suffused with russet-brown, which is still more pronounced in *birds of the year*.

Pallas's Grass-Warbler breeds in South-eastern Siberia and North China, wintering in India, Burma, and the Andaman Islands. It is also found in Nepal, and may possibly breed there at high elevations.

a. Ad. sk.	India.	Dr. Jerdon [P.]. (Type of *Phragamaticola olivacea*, Jard.)
b, *c*. Ad. sk.	India.	J. Gould, Esq. [P.].
d, *e*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
f. Ad. sk.	N.W. India.	Capt. Stackhouse Pinwill [P.].
g. ♂ ad. sk.	S. Andaman Isles, Dec. 20 (*Capt. Wimberley*).	R. B. Sharpe, Esq. [P.].
h. ♂ ad. sk.	Dauria, Nov. 27 (*Dr. Dybowsky*).	R. B. Sharpe, Esq. [P.].

2. Lusciniola gracilirostris *.

? La Caqueteuse, *Levaill. Ois. d'Afr.* iii. pl. 121. fig. 1, p. 90 (180[illegible] *undè*
? Sylvia babæcala, *Vieill. N. Dict. d'Hist. Nat.* xi. p. 172 (181[illegible] *Sundev. K. Sv. Vet.-Ak. Handl.* 1857, p. 37.
? Calamoherpe loquax, *Boie, fide Gray, Gen. B.* i. p. 172 (1848).
? Calamodyta babæcula (*Vieill.*), *Gray, Gen. B.* i. p. 172 (1848); *Layard, Ibis*, 1869, p. 365.

* There seems to be considerable circumstantial evidence (from locality &c.) that this bird is the "Caqueteuse" of Levaillant, but it is difficult to reconcile the discrepancies in the description. Under all circumstances it cannot be denied that Dr. Hartlaub was the first author who "clearly defined" this species.

Calamoherpe babœcula (*Vieill.*), *Bp. Consp.* i. p. 286 (1850); *Sharpe, Cat. Afr. B.* p. 32 (1871); *Ayres, Ibis*, 1874, p. 102.
Calamoherpe gracilirostris, *Hartlaub, Ibis*, 1864, p. 348.
Calamodyta gracilirostris (*Hartlaub*), *Layard, B. S. Afr.* p. 98 (1867); *Gray, Hand-l. B.* i. p. 207. no. 2927 (1869).
? Calamodyta beaticula, *Gray, Hand-l. B.* i. p. 208. no. 2841 (1869).
Bradypterus rufescens, *Sharpe & Bouvier, Bull. Soc. Zool. France*, 1876, p. 307.
Bradypterus gracilirostris (*Hartl.*), *Sharpe, ed. Layard's B. S. Afr.* p. 287 (1877).

General colour of the upper parts brown, gradually shading into russet-brown on the rump and upper tail-coverts; lores and ear-coverts brown; eye-stripe ill-defined, greyish white, losing itself over the eye; wings and tail brown, all the wing-coverts and quills narrowly edged with russet-brown on the outside webs; tail-feathers edged with russet-brown, and paler at the tip, especially on the outside feathers. Underparts nearly white, shading into grey on the sides of the breast, and into pale buffish brown on the flanks; thighs brown; axillaries nearly white; under wing-coverts pale buff; inner margin of quills pale buffish brown. Bill long and slender, not very wide at the base; upper mandible dark brown, under mandible pale horn-colour, darker towards the tip; rictal bristles small. Wing wide, short, and blunt; fourth and fifth primaries nearly equal and longest; second primary equal to the ninth or tenth; bastard primary 0·8 to 1·0 inch. Tail shorter than the wing, the outside feathers from 0·4 to 0·7 inch shorter than the longest. Legs, feet, and claws dark slate-colour. Length of wing 3·15 to 2·6 inches, tail 2·9 to 2·45, culmen 0·8 to 0·7, tarsus 1·1.

The plumage described is that of April and May, which I take to be that of autumn and winter. There appears to be no difference between the *male* and *female*, but *birds of the year* are more rufous both above and below. The spring and summer plumage appears to be unknown.

The South-African Grass-Warbler is found in South Africa from the Congo, Damara Land, and the Transvaal down to the Cape. It is probably a resident; but of this writers on African ornithology, with their accustomed carelessness, fail to inform us.

a–d. Ad. sk.	South Africa.	Sir A. Smith [P.].
e, f. Ad. sk.	Cape Town.	C. J. Andersson, Esq. [C.].
g. Ad. sk.	South Africa.	R. B. Sharpe, Esq.
h, i. Ad. sk.	Berg river (*E. L. Layard*).	R. B. Sharpe, Esq.
k, ♂ ad. sk.	Potchefstroom (*W. Lucas*).	Dr. Exton [P.].
m, n. ♂, *o.* ♀ ad. sk.	Potchefstroom, April 1877 (*W. Lucas*).	R. B. Sharpe, Esq. [P.].
p, q. ♂ ♀ ad. sk.	Omanbonde, Damara Land (*C. J. Andersson*).	R. B. Sharpe, Esq. [P.].
r. Ad. sk.	Lake N'Gami (*Chapman*).	R. B. Sharpe, Esq. [P.].
s. Imm. sk.	Landana, Congo (*L. Petit*).	Purchased. (Type of *Bradypterus rufescens*, Sharpe & Bouvier).

3. Lusciniola major.

Dumeticola major, *Brooks, J. A. S. Beng.* xli. p. 77 (1872).

General colour of the upper parts neutral brown; lores pale; eye-stripe indistinct greyish white, losing itself behind the eye; wings and tail a nearly uniform brown; chin and upper throat white, the lower throat and the sides of the whole throat with dark-brown cuneiform spots; the rest of the underparts obscurely mottled white and pale brown, the white predominating on the centre of the belly and under tail-coverts; axillaries nearly white; under wing-coverts pale brown, mottled with dark brown on the shoulder; inner margin of quills pale brown. Bill long and slender, both mandibles dark brown, approaching black; no rictal bristles. Wing narrow, short, and blunt; third, fourth, and fifth primaries nearly equal and longest; second primary about equal to the eighth; bastard primary 0·5 to 0·7 inch. Tail longer than the wing, the outside feathers 0·8 to 1·0 inch shorter than the longest. Legs, feet, and claws pale horn-colour. Length of wing 2·45 to 2·26 inches, tail 2·65 to 2·46, culmen 0·7 to 0·62, tarsus 0·9.

The *female* only differs from the male in having fewer spots on the throat. *Birds of the year* have more buff on the breast, and the spots on the throat are very few and very obscure. It is not known what changes of plumage take place in the adult birds *after the autumn moult.*

Brooks's Grass-Warbler breeds in Cashmere, probably migrating towards the plains at the approach of the cold season.

a. ♀ ad. sk. Ladak, June 29, 1874 (*Capt. Biddulph*). Henry Seebohm, Esq. [P.].

4. Lusciniola thoracica. (Plate VI.)

Salicaria affinis, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 53. no. 826, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 826 (1844, *desc. null.*); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* pp. 64, 151 (1846, *desc. secund.*).

Dumeticola thoracica, *Blyth, J. A. S. Beng.* xiv. p. 584 (1845, *desc. prim.*); *Blyth, Cat. B. Mus. As. Soc.* p. 183 (1849).

Calamodyta affinis (*Hodgs.*), *Gray, Gen. B.* i. p. 172 (1848); *id. Hand-l. B.* i. p. 208. no. 2950 (1869).

Bradypterus affinis (*Hodgs.*), *Cab. Mus. Hein.* i. p. 43 (1850).

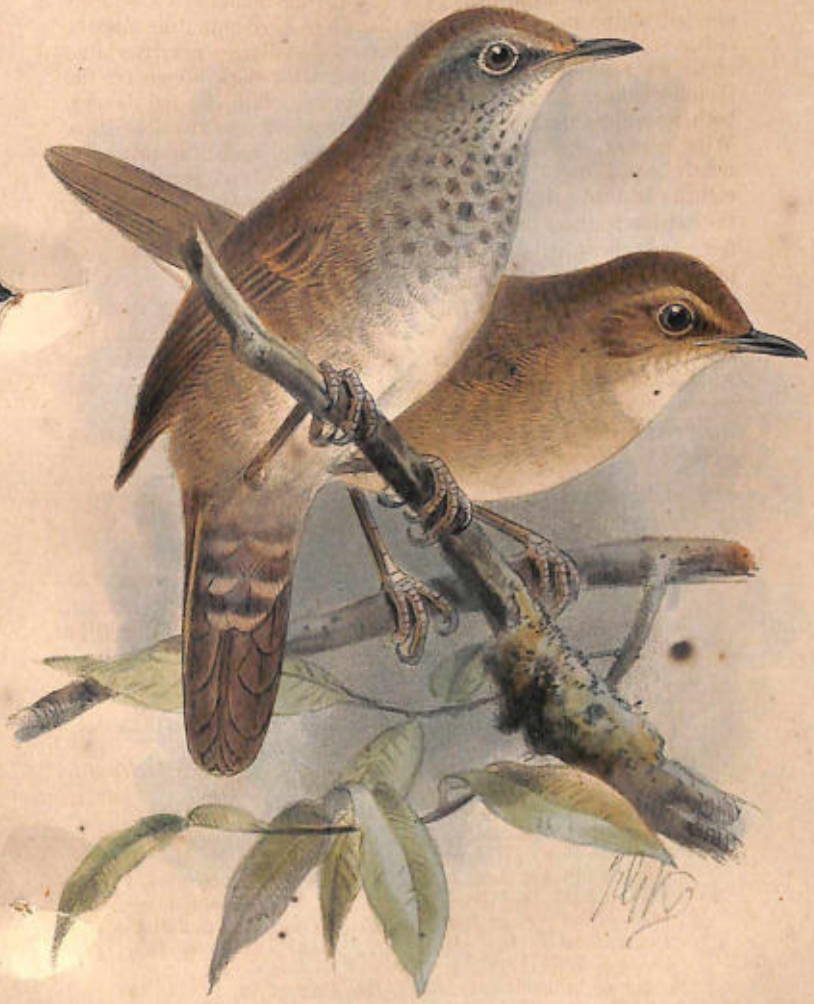
Calamoherpe affinis (*Hodgs.*), *Bp. Consp.* i. p. 285 (1850).

Dumeticola affinis (*Hodgs.*), *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 334 (1854); *Jerd. B. Ind.* ii. p. 158 (1863); *Swinhoe, P. Z. S.* 1871, p. 354; *Tacz. Journ. Orn.* 1872, p. 354; *Brooks, Stray Feath.* 1875, p. 286; *Tacz. Bull. Soc. Zool. France*, ii. p. 140 (1876); *Prjev. Rowley's Orn. Misc.* 1877, p. 169; *David et Oust. Ois. Chine*, p. 247 (1877).

Dumeticola brunneipectus, *Blyth, Ibis*, 1867, p. 19.

Locustella taczanowskia, *Swinhoe, P. Z. S.* 1871, p. 355.

Tribura luteiventris, *Hodgs. apud David et Oust. Ois. Chine*, p. 239 (1877).



J.G. Keulemans del. Mintern Bros. imp.

Luscinia thoracica.

General colour of the upper parts dark russet-brown with a slight tinge of olive; lores and the feathers behind the eye dark brown; eye-stripe pale ashy white, indistinct, and soon losing itself behind the eye; wings and tail scarcely duller in colour than the back; chin and centre of belly nearly white, shading into ashy grey on the throat and breast and into olive-brown on the flanks and under tail-coverts; the throat is more or less profusely spotted with dark brown, and the under tail-coverts are broadly tipped with nearly white; axillaries and under wing-coverts nearly white, the latter mottled with brown; inner margin of quills pale brown. Bill Phylloscopine, dark brown, nearly black, frequently paler at the base of the lower mandible; rictal bristles obsolete. Wings considerably concaved; third, fourth, and fifth primaries nearly equal and longest; second primary equal to the ninth or tenth; first primary about half the length of the second. Tail shorter than the wing, outside feathers 0·8 to 0·9 inch shorter than the longest. Legs, feet, and claws pale horn-colour. Length of wing 2·3 to 2·03 inches, tail 2·15 to 1·8, culmen 0·52 to 0·47, tarsus 0·83 to 0·73.

It is not known that there is any difference of plumage in the sexes, though some birds are much more spotted on the throat than others. In what I take to be *winter plumage* the upper parts are much more olive, and may be described as olive-brown with a slight shade of russet, and the spots on the throat are somewhat obscure. A third variety has the upper parts of the same colour as the supposed winter plumage, but has no spots on the throat, and the ash-grey of the throat and breast is replaced by pale chestnut-brown. This I take to be *young in first winter plumage*, though Blyth has described it as a separate species. One of the skins in the collection, in the plumage last described, has undoubtedly fourteen tail-feathers. This is probably only an accidental monstrosity.

Hodgson's Grass-Warbler is found in the Himalayas, where it is probably a partial migrant. It has been found in Nepal and Sikkim and at Simla. It also breeds in South Siberia and North-west China, where it is undoubtedly only a summer visitor.

a, *b*. Ad., *c*. Juv. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
d. Juv. sk.	Between Simla and Mussoorie.	Capt. Stackhouse Pinwill [P.].
e–*k*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].

5. Lusciniola luteiventris.

Tribura luteoventris, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 60, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 851 (1844, *descr. null.*); *Hodgs. P. Z. S.* 1845, p. 30 (*descr. prim.*); *Blyth, J. A. S. Beng.* xiv. p. 583 (1845); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 64 (1846); *Bp. Consp.* i. p. 291 (1850); *Jerd. B. Ind.* ii. p. 161 (1863); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 30 (1863); *Swinhoe, P. Z. S.* 1871, p. 355.

Calamodyta luteoventris (*Hodgs.*), *Gray, Gen. B.* i. p. 172 (1848); *Gray, Hand-l. B.* i. p. 210. no. 2977 (1869).

Pseudoluscinia luteoventris (*Hodgs.*), *Blyth, Cat. B. Mus. As. Soc.* p. 182 (1849).
Lusciniopsis brevipennis, *Verr. N. Arch. du Mus., Bull.* vi. p. 65 (1871).
Dumeticola mandelli, *Brooks, Stray Feath.* 1875, p. 284.
Dumeticola luteoventris (*Hodgs.*), *Brooks, Stray Feath.* 1875, p. 286.
Homochlamys brevipennis (*Verr.*), *David et Oust. Ois. Chine*, p. 245 (1877).

General colour of the upper parts russet-brown, inclining to olive; lores and behind the eye dark brown; eye-stripe pale chestnut, very indistinct; wings and tail slightly darker than the back; chin, throat, and centre of belly nearly white, shading into pale chestnut on the breast, flanks, thighs, and under tail-coverts; axillaries and under wing-coverts buffish white, mottled with brown on the shoulder; inner margin of quills pale brown. Bill Phylloscopine, upper mandible dark brown, under mandible pale horn-colour; rictal bristles obsolete. Wing short, blunt, and somewhat concaved; third, fourth, fifth, and sixth primaries nearly equal and longest; second primary equal to the secondaries, bastard primary half the length of the second primary. Tail longer than the wing, outside feathers 1 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·23 to 1·95 inches, tail 2·6 to 2·2, culmen 0·51 to 0·5, tarsus 0·8 to 0·7.

In some skins the brown of the upper parts is slightly more olive. These may be winter plumage of adults or young.

So far as is known, the Brown Grass-Warbler is confined to the Himalayas, having hitherto only been found in Nepal and Sikkim. The skins which l'Abbé David obtained at Moupin appear to me to be birds of the year of *L. thoracica* (Blyth).

a, b, c, d. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Types of *Tribura luteoventris*, Hodgs.)
e, f, g, h. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
i, k. Ad. sk.	Nepal (*Hodgson*).	India Museum.
l. Ad. sk.	Darjeeling.	J. Fotheringham, Esq. [C.].

6. Lusciniola indica.

Sylvia indica, *Jerdon, Madras Journ.* xi. p. 6 (1840); *Gray, Hand-l. B.* i. p. 216. no. 3053 (1869).
Phylloscopus griseolus, *Blyth, J. A. S. Beng.* xvi. p. 443 (1847).
Sylvia griseola (*Blyth*), *Gray, Gen. B.* i. p. 174 (1848).
Regulus affinis (*Tickell*), *apud Gray, Gen. B.* i. p. 175 (1848).
Phyllopneuste indicus (*Jerdon*), *Blyth, Cat. B. Mus. As. Soc.* p. 183 (1849).
Phyllopneuste griseola (*Blyth*), *Bp. Consp.* i. p. 290 (1850).
Phylloscopus indicus (*Jerdon*), *Jerdon, B. India*, ii. p. 194 (1863); *Brooks, Ibis*, 1869, p. 56; *id. Ibis*, 1872, p. 31; *Godwin-Austen, J. A. S. Beng.* xli. pt. 2, p. 142 (1872); *Seebohm, Ibis*, 1877, p. 87.
Ficedula obscura, *Severtz. Turkest. Jevotn.* pp. 65, 124 (1873, *see Ibis*, 1876, p. 82).
Phyllopneuste indica (*Jerdon*), *Giebel, Thes. Orn.* iii. p. 119 (1877).
Lusciniola indica (*Jerdon*), *Seebohm, Ibis*, 1880, p. 277.

General colour of the upper parts earthy brown, with a scarcely perceptible ochraceous tinge on the rump; eye-stripe from the base of the bill to over the eye deep yellow, shading into buff behind the eye to the nape; lores and the feathers behind the eye earthy brown; quills brown, with very narrow pale tips; tail-feathers brown, narrowly tipped and margined on the inner web with greyish white. General colour of the underparts buffish yellow, greyer on the breast and flanks; axillaries and under wing-coverts buff; inner margins of quills greyish buff. Bill Phylloscopine, upper mandible dark brown, under mandible pale horn-colour; rictal bristles moderately developed. Wing rather short and blunt; fourth and fifth primaries nearly equal and longest, second primary about equal to the tenth; bastard primary 0·85 to 0·65 inch, sometimes more, sometimes less than half the length of the second. Tail shorter than the wing, the outside feathers 0·1 inch shorter than the longest. Legs, feet, and claws brown. Length of wing 2·65 to 2·2 inches, tail 2·2 to 1·75, culmen 0·55 to 0·49, tarsus 0·8 to 0·75.

The *female* scarcely differs from the male. *After the autumn moult* the yellow of the underparts is slightly more buff.

Jerdon's Grass-Warbler probably breeds in the alpine districts of the Himalayas, and winters in Central India.

a. Ad. sk. Matheran, Bombay, Feb. 4, 1872. Major Hayes Lloyd [P.].
b. ♀ ad. sk. Almorah, N.W. India (*Brooke*). H. Seebohm, Esq. [P.].

7. Lusciniola fuscata.

Phyllopneuste fuscata, *Blyth, J. A. S. Beng.* xi. p. 113 (1842); *Bp. Consp.* i. p. 290 (1850); *Swinh. P. Z. S.* 1871, p. 356; *Homeyer, Journ. Orn.* 1872, p. 202; *Blyth & Walden, B. Burma*, p. 105 (1875); *Tacz. Bull. Soc. Zool. France*, 1876, p. 140; *Prjev. Rowley's Orn. Misc.* ii. p. 171 (1877); *David et Oust. Ois. Chine*, p. 207 (1877).

Horornis fulviventris, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 63. no. 878 (*circ.* 1844); *Hodgs. P. Z. S.* 1845, p. 31; *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 64 (1846); *Bp. Consp.* i. p. 290 (1850).

Phylloscopus brunneus, *Blyth, J. A. S. Beng.* xiv. p. 591 (1845); *Blyth, Cat. B. Mus. As. Soc.* p. 185 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 338 (1854).

Sylvia fuscata (*Blyth*), *Gray, Gen. B.* i. p. 174 (1848).

Regulus fulviventris (*Hodgs.*), *Gray, Gen. B.* i. p. 175 (1848).

Phylloscopus fuscatus (*Blyth*), *Blyth, Cat. B. Mus. As. Soc.* p. 185 (1849); *Jerdon, B. Ind.* ii. p. 191 (1863); *Blyth, Ibis*, 1867, p. 25; *Seebohm, Ibis*, 1877, p. 85; *Hume, Stray Feath.* vi. p. 352 (1878); *Seebohm, Ibis*, 1879, p. 11.

Sylvia (Phyllopneuste) sibirica, *Midd. Sibir. Reise*, p. 180 (1853); *Radde, Reis. Sibir., Vög.* p. 200 (1863).

Sylvia brunnea (*Blyth*), *Gray, Hand-l. B.* i. p. 216. no. 3057 (1869).

Phyllopneuste brunneus (*Blyth*), *Blyth, Cat. Mamm. & B. of Burma*, p. 105 (1875).

Phyllopseuste fuscata (*Blyth*), *Giebel, Thes. Orn.* iii. p. 118 (1877).

Phyllopseuste brunnea (*Blyth*), *Giebel, Thes. Orn.* iii. p. 118 (1877).

Lusciniola fuscata (*Blyth*), *Seebohm, Ibis*, 1880, p. 277.

Pseudoluscinia luteoventris (*Hodgs.*), *Blyth, Cat. B. Mus. As. Soc.* p. 182 (1849).
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Dumeticola mandelli, *Brooks, Stray Feath.* 1875, p. 284.
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General colour of the upper parts russet-brown, inclining to olive; lores and behind the eye dark brown; eye-stripe pale chestnut, very indistinct; wings and tail slightly darker than the back; chin, throat, and centre of belly nearly white, shading into pale chestnut on the breast, flanks, thighs, and under tail-coverts; axillaries and under wing-coverts buffish white, mottled with brown on the shoulder; inner margin of quills pale brown. Bill Phylloscopine, upper mandible dark brown, under mandible pale horn-colour; rictal bristles obsolete. Wing short, blunt, and somewhat concaved; third, fourth, fifth, and sixth primaries nearly equal and longest; second primary equal to the secondaries, bastard primary half the length of the second primary. Tail longer than the wing, outside feathers 1 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·23 to 1·95 inches, tail 2·6 to 2·2, culmen 0·51 to 0·5, tarsus 0·8 to 0·7.

In some skins the brown of the upper parts is slightly more olive. These may be winter plumage of adults or young.

So far as is known, the Brown Grass-Warbler is confined to the Himalayas, having hitherto only been found in Nepal and Sikkim. The skins which l'Abbé David obtained at Moupin appear to me to be birds of the year of *L. thoracica* (Blyth).

a, *b*, *c*, *d*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Types of *Tribura luteoventris*, Hodgs.)
e, *f*, *g*, *h*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
i, *k*. Ad. sk.	Nepal (*Hodgson*).	India Museum.
l. Ad. sk.	Darjeeling.	J. Fotheringham, Esq. [C.].

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Sylvia griseola (*Blyth*), *Gray, Gen. B.* i. p. 174 (1848).
Regulus affinis (*Tickell*), *apud Gray, Gen. B.* i. p. 175 (1848).
Phyllopneuste indicus (*Jerdon*), *Blyth, Cat. B. Mus. As. Soc.* p. 183 (1849).
Phyllopneuste griseola (*Blyth*), *Bp. Consp.* i. p. 290 (1850).
Phylloscopus indicus (*Jerdon*), *Jerdon, B. India*, ii. p. 194 (1863); *Brooks, Ibis*, 1869, p. 56; *id. Ibis*, 1872, p. 31; *Godwin-Austen, J. A. S. Beng.* xli. pt. 2, p. 142 (1872); *Seebohm, Ibis*, 1877, p. 87.
Ficedula obscura, *Severtz. Turkest. Jevotn.* pp. 65, 124 (1873, *see Ibis*, 1876, p. 82).
Phyllopneuste indica (*Jerdon*), *Giebel, Thes. Orn.* iii. p. 119 (1877).
Lusciniola indica (*Jerdon*), *Seebohm, Ibis*, 1880, p. 277.

General colour of the upper parts earthy brown, with a scarcely perceptible ochraceous tinge on the rump; eye-stripe from the base of the bill to over the eye deep yellow, shading into buff behind the eye to the nape; lores and the feathers behind the eye earthy brown; quills brown, with very narrow pale tips; tail-feathers brown, narrowly tipped and margined on the inner web with greyish white. General colour of the underparts buffish yellow, greyer on the breast and flanks; axillaries and under wing-coverts buff; inner margins of quills greyish buff. Bill Phylloscopine, upper mandible dark brown, under mandible pale horn-colour; rictal bristles moderately developed. Wing rather short and blunt; fourth and fifth primaries nearly equal and longest, second primary about equal to the tenth; bastard primary 0·85 to 0·65 inch, sometimes more, sometimes less than half the length of the second. Tail shorter than the wing, the outside feathers 0·1 inch shorter than the longest. Legs, feet, and claws brown. Length of wing 2·65 to 2·2 inches, tail 2·2 to 1·75, culmen 0·55 to 0·49, tarsus 0·8 to 0·75.

The *female* scarcely differs from the male. *After the autumn moult* the yellow of the underparts is slightly more buff.

Jerdon's Grass-Warbler probably breeds in the alpine districts of the Himalayas, and winters in Central India.

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7. Lusciniola fuscata.

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Horornis fulviventris, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 63. no. 878 (*circ.* 1844); *Hodgs. P. Z. S.* 1845, p. 31; *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 64 (1846); *Bp. Consp.* i. p. 290 (1850).

Phylloscopus brunneus, *Blyth, J. A. S. Beng.* xiv. p. 591 (1845); *Blyth, Cat. B. Mus. As. Soc.* p. 185 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 338 (1854).

Sylvia fuscata (*Blyth*), *Gray, Gen. B.* i. p. 174 (1848).

Regulus fulviventris (*Hodgs.*), *Gray, Gen. B.* i. p. 175 (1848).

Phylloscopus fuscatus (*Blyth*), *Blyth, Cat. B. Mus. As. Soc.* p. 185 (1849); *Jerdon, B. Ind.* ii. p. 191 (1863); *Blyth, Ibis*, 1867, p. 25; *Seebohm, Ibis*, 1877, p. 85; *Hume, Stray Feath.* vi. p. 352 (1878); *Seebohm, Ibis*, 1879, p. 11.

Sylvia (Phyllopneuste) sibirica, *Midd. Sibir. Reise*, p. 180 (1853); *Radde, Reis. Sibir., Vög.* p. 200 (1863).

Sylvia brunnea (*Blyth*), *Gray, Hand-l. B.* i. p. 216. no. 3057 (1869).

Phyllopneuste brunneus (*Blyth*), *Blyth, Cat. Mamm. & B. of Burma*, p. 105 (1875).

Phyllopseuste fuscata (*Blyth*), *Giebel, Thes. Orn.* iii. p. 118 (1877).

Phyllopseuste brunnea (*Blyth*), *Giebel, Thes. Orn.* iii. p. 118 (1877).

Lusciniola fuscata (*Blyth*), *Seebohm, Ibis*, 1880, p. 277.

General colour of the upper parts brown; a narrow, well-defined buffish-white eye-stripe extends from the base of the bill as far as the nape; the feathers before the eye and behind the eye as far as the nape dark brown; quills brown; tail-feathers brown, the inside webs narrowly edged with pale buff. General colour of the underparts buffish white, shading into buff on the breast, flanks, and under tail-coverts; axillaries, under wing-coverts, and thighs buff; inner margin of quills greyish buff. Bill Phylloscopine, upper mandible dark brown, under mandible pale, darkening towards the tip; rictal bristles fairly developed. Fourth and fifth primaries longest; second primary equal in length to the ninth or tenth; bastard primary 0·8 to 0·7 inch, rather more than half the length of the second. Tail shorter than the wing; outside feathers 0·1 inch shorter than the longest. Legs, feet, and claws brown. Length of wing, male 2·55 to 2·3 inches, female 2·35 to 2·15; length of tail, male 2·4 to 2·2, female 2·2 to 2·0; length of culmen 0·45 to 0·49; tarsus 0·9 to 0·8.

The *female* does not differ from the male. The only effects of abrasion appear to be that the buff of the underparts becomes slightly greyer. *After the autumn moult* the brown of the upper parts is slightly richer, the eye-stripe is pale buff, and the breast, flanks, and under tail-coverts are a rich buff approaching chestnut.

Blyth's Grass-Warbler breeds in South-eastern Siberia and Japan, passes through South-eastern Mongolia and North China on migration, and winters in Formosa, South China, Assam, Burma, and near Calcutta.

a. ♂, *b*. ♀ ad. sk.	Lake Baikal, Sept. 7, Aug. 28 (*Dr. Dybowsky*).	R. B. Sharpe, Esq. [P.].
c. Ad. sk.	Siberia (*Middendorff*?).	Prof. Brandt [C.].
d, *e*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
f. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Horornis fulviventris*, Hodgson.)
g. Ad. sk.	Nepal (*Hodgson*).	India Museum.
h. Ad. sk.	Calcutta (*As. Soc.*).	India Museum.
i. ♀ ad. sk.	Upper Burma, Jan. 9.	Dr. Anderson [C.].
k. Ad. sk.	Amoy, China (*R. Swinhoe*).	F. Godman and O. Salvin, Esqrs. [P.].
l. Ad. sk.	Amoy, April (*Swinhoe*).	Henry Seebohm, Esq. [P.].

8. Lusciniola schwarzi.

Salicaria cantillans (*Temm. et Schl.*) *apud Swinhoe, P. Z. S.* 1862, p. 316.

Sylvia (Phyllopneuste) schwarzi, *Radde, Reis. Sibir., Vög.* p. 260 (1863).

Sylvia schwarzi (*Radde*), *Gray, Hand-l. B.* i. p. 215. no. 3041 (1869).

Arundinax flemingi, *Swinhoe, P. Z. S.* 1870, p. 440.

Herbivocula flemingi (*Swinh.*), *Swinhoe, P. Z. S.* 1871, p. 354; *David et Oust. Ois. Chine*, p. 245 (1877).

Phylloscopus brooksi, *Hume, Stray Feath.* ii. p. 505 (1874).

Phyllopneuste brooksi (*Hume*), *Blyth & Wald. B. Burm.* p. 105 (1875).

Phyllopneuste schwarzi (*Radde*), *Tacz. Bull. Soc. Zool. France*, i. p. 140 (1876).
Phylloscopus schwarzi (*Radde*), *Seebohm, Ibis*, 1877, p. 84; *Hume, Stray Feath.* vi. p. 353 (1878).
Herbivocula incerta, *David et Oust. Ois. Chine*, p. 246 (1877).
Oreopneuste affinis, *David et Oust. loc. cit.* p. 267 (1877).
Lusciniola schwarzi (*Radde*), *Seebohm, Ibis*, 1880, p. 277.

General colour of the upper parts dusky olive-brown, somewhat less dusky on the rump; eye-stripe pale buff from the base of the bill to the eye, over and behind the eye to the nape pale buffish white and very sharply defined; lores and the feathers behind the eye brown; quills brown, edged on the outside web with olive; tail-feathers brown, margined on the outside webs with olive and on the inside webs with pale brown. General colour of the underparts yellowish white, fading into nearly pure white on the throat and the centre of the belly, buffer on the breast, flanks, and thighs, and becoming yellowish buff on the under tail-coverts; axillaries and under wing-coverts buff; inner margin of quills pale buff. Bill much stouter than in typical *Phylloscopus*; upper mandible dark brown, under mandible pale; rictal bristles fairly developed. Tail shorter than the wing; outside feathers 0·2 to 1·5 inch shorter than the longest. Fourth and fifth primaries longest; second primary intermediate in length between the seventh and eighth; bastard primary frequently more than half the length of the second, the exposed part measuring 0·75 to 0·9 inch. Legs, feet, and claws pale horn-colour. Length of wing 2·5 to 2·35 inches, tail 2·2 to 2·05, culmen 0·48 to 0·5, tarsus 0·9 to 0·85.

The *female* does not differ from the male. Most of the olive on the upper parts disappears in very abraded skins, and the underparts become paler. *After the autumn moult* the upper parts become tawny olive where they were dusky olive in spring, and the underparts are more or less suffused all over with a tawny buff. The eye-stripe is also much buffer.

Radde's Grass-Warbler breeds in South-eastern Siberia, passes through North China on migration, and winters in South China where it borders on Thibet and in the Burma peninsula.

a. ♂ ad. sk. Lake Baikal, June 15 (*Dr. Dybowsky*). Henry Seebohm, Esq. [P.].

9. Lusciniola fuliginiventris.

Horornis fuliginventer, *Hodgson, P. Z. S.* 1845, p. 31; *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 335 (1854).
Horornis fuliginventris (*Hodgs.*), *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 64 (1846).
Regulus fuliginoventris (*Hodgs.*), *Gray, Gen. B.* i. p. 175 (1848).
Horornis fuliginiventris (*Hodgs.*), *Bp. Consp.* i. p. 290 (1850).
Horornis fuliginiventer (*Hodgs.*), *Blyth, Ibis*, 1867, p. 21.
Phylloscopus fuliginiventer (*Hodgs.*), *Blyth, Ibis*, 1867, p. 28; *Blanf. J. A. S. Beng.* xli. pt. 2, p. 54 (1872).
Sylvia fuliginiventris (*Hodgs.*), *Gray, Hand-l. B.* i. p. 218. no. 3097 (1869).

Phylloscopus fuliginiventris (*Hodgs.*), *Seebohm, Ibis*, 1877, p. 88.
Lusciniola fuliginiventris (*Hodgs.*), *Seebohm, Ibis*, 1880, p. 277.

The general colour of the upper parts is dark olive-brown; the wings and tail-feathers are dull chocolate-brown; the eye-stripe, which is very indistinct, and the whole of the underparts, including the axillaries and under wing-coverts, are pale olive-brown, yellowish on the throat and centre of the belly; inner margin of quills dark greyish buff. Bill Phylloscopine; both mandibles dark brown, the under mandible slightly paler at the base. Fourth and fifth primaries longest; second primary about equal to the tenth; bastard primary more than half the length of the second, the exposed part measuring 0·7 to 0·8 inch. Legs, feet, and claws brown. Tail shorter than the wing; outside feathers 0·2 inch shorter than the longest. Length of wing 2·3 to 2·1 inches, tail 2·0 to 1·75, culmen 0·45 to 0·5, tarsus 0·8.

The *female* is supposed to be similar to the male. Nothing is known of the changes of plumage of this species, no sexed or dated skins being accessible in this country. We may, however, safely assume that they are unimportant, and that the effects of abrasion are also slight in a bird which can scarcely be called a migrant.

So far as is known, the Smoky Grass-Warbler is confined to Nepal and Sikkim, breeding at some elevation on the hills, and retiring to the valleys during the cold season.

a, b, c, d, e. Ad. sk. Nepal. B. H. Hodgson, Esq. [P.].
(Types of *Horornis fuligiventer*, Hodgs.)
f. Ad. sk. Nepal (*Hodgson*). India Museum.

10. Lusciniola armandi.

Abrornis armandi, *Milne-Edwards, N. Arch. Mus. Bull.* i. p. 22 (1865); *Prjev. Rowley's Orn. Misc.* ii. p. 172 (1877).
Sylvia armandi (*M.-Edwards*), *Gray, Hand-l. B.* i. p. 217. no. 3093 (1869).
Oreopneuste davidii, *Swinh. P. Z. S.* 1871, p. 355.
Oreopneuste armandi (*Milne-Edw.*), *David et Oust. Ois. Chine*, p. 265 (1877).
Lusciniola armandi (*Milne-Edw.*), *Seebohm, Ibis*, 1880, p. 277.

This species appears to be distinct from *L. fuscata*. I have only seen the skin in my own collection (Moupin, *Père David*, July 5, 1869), and two skins in the Museum of the Jardin de Plantes, collected by the same eminent field-naturalist. These skins all agree in having the bill somewhat stouter than that of *L. fuscata*, and in having the throat and belly greenish white instead of buffish white. The feet are more slender than those of *L. fuscata*, and much more so than those of *L. schwarzi*. In all other respects there is no apparent difference between the two species. The height of the bill at the nostrils of *L. fuscata* measures 0·09 inch, of *L. armandi* 0·11, and of *L. schwarzi* 0·15.

Wing with the third to the sixth primaries nearly equal and longest; second primary about equal to the eighth or slightly shorter; bastard primary 0·7 to 0·65 inch. Outer tail-feathers 0·15

inch shorter than the longest. Length of wing 2·3 to 2·25 inches, tail 2·0 to 1·9, culmen 0·49, tarsus 0·8.

Nothing is known of the changes which may be produced by age, season, or sex.

But little is known of the geographical distribution of David's Grass-Warbler—it having only been recorded from S.E. Mongolia, Northern and Western China.

The British Museum does not possess an example of this species. I have examined the types in the Paris Museum, and have in my collection one of the skins obtained by l'Abbé David.

11. Lusciniola neglecta.

Phylloscopus neglectus, *Hume*, *Ibis*, 1870, p. 143; *Blanf. East. Pers.* ii. p. 182 (1876); *Seebohm*, *Ibis*, 1877, p. 99.
Phyllopneuste neglectus (*Hume*), *Hume*, *Str. F.* i. p. 195 (1873).
Lusciniola neglecta, *Seebohm*, *Ibis*, 1880, p. 277.

General colour of the upper parts earthy brown, very slightly suffused with green on the rump; eye-stripe ill-defined; buffish white, and not extending far behind the eye; lores and the feathers behind the eye brown; wing-coverts and quills brown, with paler edges, the latter emarginated as far as the sixth quill; tail-feathers brown, with paler margins. Underparts, including the axillaries, pale buffish white, darker on the breast and flanks; inner margin of quills very pale buffish white. Bill slender, Phylloscopine, both mandibles dark brown; rictal bristles fairly developed. Third, fourth, and fifth primaries longest; second primary equal to the eighth or ninth; the exposed part of the bastard primary measures 0·6 inch. Tail shorter than the wing; outside feathers 0·15 inch shorter than the longest. Legs, feet, and claws dark brown. Length of wing, male 2·05 inches, female 1·95; tail, male 1·7, female 1·6; culmen 0·4.

It is not known that the *female* differs from the male in colour. In *winter* the upper parts fade into an almost neutral grey.

The breeding-place of Hume's Grass-Warbler is unknown. It winters in Scinde and Baluchistan.

a. ♂ ad. sk.	West of Nechar district, Scinde, December 20 (*W. T. Blanford*).	Henry Seebohm, Esq. [P.].

12. Lusciniola flaviventris.

Horornis flaviventris, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 63*a*. fig. 1, no. 849, *undè Hodgs. Gray's Zool. Misc.* p. 82 (1844, *descr. null.*); *Hodgs. P. Z. S.* 1845, p. 31; *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 64 (1846); *Bp. Consp.* i. p. 290 (1850); *Jerdon, B. Ind.* ii. p. 162 (1863).
Regulus flaviventris (*Hodgs.*), *Gray, Gen. B.* i. p. 172 (1848).
Calamodyta flaviventris (*Hodgs.*), *Gray, Hand-l. B.* i. p. 208. no. 2951 (1869).

General colour of the upper parts russet-brown; eye-stripe pale

brownish yellow, somewhat indistinct, and soon losing itself behind the eye; wings and tail scarcely duller than the back. Underparts buffish yellow, shading into brown on the breast, flanks, thighs, and under tail-coverts, the latter with broad pale tips; axillaries pale buffish yellow; under wing-coverts nearly white, shading into greenish yellow on the shoulder; inner margin of quills pale buffish brown. Bill Phylloscopine: upper mandible dark brown, under mandible pale; rictal bristles obsolete. Wing somewhat concaved; fourth and fifth primaries nearly equal and longest; second primary equal in length to the secondaries; first primary rather more than half the length of the second. Tail shorter than the wing, outside feathers 0·5 inch shorter than the longest. Legs, feet, and claws pale. Length of wing 2·0 inches, tail 1·85 to 1·7, culmen 0·5 to 0·40, tarsus 0·8.

Nothing is known of the difference of plumage that may be attributable to age, sex, or season.

The Yellow-bellied Grass-Warbler has only been recorded from Nepal, and nothing is known of its migrations.

a, *b*, *c*. Ad. sk. Nepal. B. H. Hodgson, Esq. [P.].
(Types of *Horornis flaviventris*, Hodgs.)

13. Lusciniola melanopogon.

Sylvia melanopogon, *Temm. Pl. Col.* pl. 245. fig. 2 (1823); *Roux, Orn. Prov.* p. 357 (1825); *Savi, Orn. Tosc.* i. pl. 279 (1827); *Temm. Man. d'Orn.* iii. p. 121 (1835); *Crespon, Orn. Gard.* p. 121 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 146 (1840).

Calamodyta melanopogon (*Temm.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838); *Gray, Gen. B.* i. p. 172 (1848); *Bp. Consp.* i. p. 287 (1850); *Gray, Hand-l. B.* i. p. 210. no. 2969 (1869); *Fritsch, Vög. Eur.* p. 157 (1870); *Shelley, B. Egypt*, p. 93 (1872).

Salicaria melanopogon (*Temm.*), *Keys. u. Blas.** *Wirb. Eur.* p. lv (1840); *Schl. Rev. Crit.* p. xxix (1844); *Linderm. Vög. Griechenl.* p. 96 (1860).

Lusciniola melanopogon (*Temm.*), *Gray, List Gen.* p. 28 (1841); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Heugl. Orn. N.O.-Afr.* i. p. viii (1869); *Salvad. Faun. Ital. Ucc.* p. 116 (1871); *Hume, Stray Feath.* 1873, p. 190; *Dresser, B. Eur.* pt. lvi. (1876).

Cettia melanopogon (*Temm.*), *Gerbe, Dict. Univ. d'Hist. Nat.* xi. p. 240 (1848); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 252 (1859).

Sylvia (Calamoherpe) melampogon (*Temm.*), *Naum. Vög. Deutschl.* xiii. p. 456 (1853).

Caricicola melanopogon (*Temm.*), *Brehm, Vogelf.* p. 236 (1855).

Caricicola bonelli, *Brehm, Vogelf.* p. 236 (1855).

Amnicola melanopogon (*Temm.*), *Degl. et Gerbe, Orn. Eur.* i. p. 527 (1867); *Doderl. Avif. Sicil.* p. 127 (1869).

Acrocephalus melanopogon (*Temm.*), *Irby, B. Gibr.* p. 223 (1875).

Calamodus melanopogon (*Temm.*), *Blanf. East. Pers.* ii. p. 198 (1876).

General colour of the upper parts russet-brown, each feather on the centre of the back having obscure dark centres; head dark brown, nearly black; each feather very narrowly margined with

* Typ. err. *melampogon*.

russet-brown; lores, the feathers behind the eye, and the ear-coverts dark brown; eye-stripe greyish white, very distinct, and losing itself at the nape; wings brown, the outside webs of the quills margined with russet-brown; wing-coverts, innermost secondaries, and tail dark brown, approaching black, edged with russet-brown. Underparts nearly white, slightly tinged with russet-brown on the breast, and more so on the flanks and thighs; axillaries and under wing-coverts white; inner margin of quills pale brown. Bill long and slender, not very wide at the base, dark brown, approaching black, slightly paler at the base of the under mandible; rictal bristles very small. Wing rather short and blunt, and somewhat concaved; third, fourth, and fifth primaries nearly equal and longest; second primary intermediate in length between the eighth and ninth; bastard primary less than half the length of the second, measuring 0·55 to 0·65 inch. Tail shorter than the wing; outside feathers 0·4 inch shorter than the longest. Legs, feet, and claws very dark brown. Length of wing 2·42 to 2·18 inches, tail 2·12 to 1·8, culmen 0·6 to 0·54, tarsus 0·8.

The head of the *female* is slightly paler than that of the male. *After the autumn moult* the underparts have less brown on the breast and flanks; but in *birds of the year* this is more developed, leaving the chin, throat, and centre of belly alone nearly white.

The Moustached Grass-Warbler appears to be a resident on both shores of the Mediterranean; extending eastwards into Persia. In Scinde and the North-west Provinces of India it appears to be only a visitor during the cold season, probably breeding in Turkestan, though Severtzoff does not record it from there.

a, *b*. ♂ ad. sk.	Egypt (*Capt. Shelley*).	R. B. Sharpe, Esq.
c. ♀ ad sk.	Damietta, Egypt, Mar. 23.	Capt. Shelley [P.].
d. ♀ ad. sk.	Shiraz, S. Persia, 4750 feet, June.	W. T. Blanford, Esq. [C.].
e. Juv. sk.	Shiraz, S. Persia, 7000 feet, June 26.	W. T. Blanford, Esq. [C.].

7. CETTIA.

	Type.
Cettia, *Bonap. Comp. List B. Eur. & N. Amer.* p. 11 (1838)	C. cetti.
Horeites, *Hodgs. P. Z. S.* 1845, p. 30	C. brunneifrons.
Horornis, *Hodgs. P. Z. S.* 1845, p. 31	C. fortipes.
Neornis, *Blyth, J. A. S. Beng.* xiv. pt. ii. p. 590 (1845, *ex Hodgs.*)	C. flavolivacea.
Homochlamys, *Salvad. Atti Acc. Sc. Tor.* v. p. 510 (1870)	C. canturians.
Herbivox, *Swinhoe, P. Z. S.* 1871, p. 353	C. cantans.
Urosphena, *Swinhoe, Ibis*, 1877, p. 205	C. squamiceps.

The genus *Cettia* contains a small group of Bush-Warblers, distinguished by having only ten tail-feathers. It forms a connecting link between the sharp, flat-winged *Sylviidæ* and the round concave-winged *Sylviidæ*. In some species the wing is not much concaved, but in all it is very rounded. The first primary is always half the length

of the second, and generally rather more than half; the second primary is about equal in length to the secondaries. The tail is considerably rounded, the outside feathers being only from two thirds to five sixths the length of the longest. The tarsus and feet are very robust; the former more or less distinctly scutellated in front. The feathers of the rump are usually much developed. The predominant colours are russet-brown and olive-brown, many of the species having the head of a redder and richer colour than the rest of the upper parts. So far as is known, most of the species lay eggs of a uniform brick-red colour. Most of the species have very rich and melodious voices, but very poor powers of song.

The centre of distribution of this genus is the Himalayas, where five of the species breed; of these, two extend their range to Chinese Thibet. Four other species appear to be peculiar to China and Japan, and one to Manchooria; whilst the remaining species breeds in Turkestan and winters in Scinde, extending its range westwards to the Mediterranean, throughout the shores of which inland sea it appears to be a resident.

Key to the Species.

a. Head uniform in colour with the rest of the upper parts.
  a'. Upper parts russet-brown.
    a''. General colour of underparts white, shading into greyish brown on the breast and flanks ..... *cetti*, p. 135.
    b''. General colour of underparts pale buffish brown, shading into buffish brown on the breast and flanks ..... *fortipes*, p. 136.
  b'. Upper parts olive-brown.
    c''. General colour of underparts yellow, shading into buff on the breast and flanks ..... *flavolivacea*, p. 138.
    d''. General colour of underparts white, shading into brown on the breast and flanks.
      a'''. Wing one fifth longer than the tail.. *pallidipes*, p. 139.
      b'''. Wing shorter or not more than one tenth longer than the tail.
        *a*⁴. Upper parts olive-green. Tail equal to or longer than the wing ..... *cantans*, p. 139.
        *b*⁴. Upper parts olive-brown. Tail equal to or shorter than the wing .... *cantans minuta*, p. 140.
b. Head darker, richer, and more russet in colour than the rest of the upper parts.
  e''. Breast suffused with buffish brown.
    c'''. Tail about one tenth shorter than the wing.
      *c*⁴. Length of wing 2·4 to 2·2 inches .. *minuta*, p. 141.
      *d*⁴. Length of wing 3·1 to 2·8 inches .. *canturians*, p. 141.
    d'''. Tail little more than half the length of the wing.
      *e*⁴. Back olive-brown..... *ussurianus*, p. 143.
      *f*⁴. Back rich chocolate-brown ..... *squamiceps*, p. 142.

f' Breast suffused with pale slate-grey.
e'''. Length of wing 1·95 to 1·7 inch .... *brunneifrons*, p. 143.
f'''. Length of wing 2·63 to 2·41 inches.. *major*, p. 145.

1. Cettia cetti.

Usignuolo di fiume, *Cetti, Ucc. d. Sard.* p. 216 (1776).
Bouscarle, *Buff. Hist. Nat. Ois.* v. p. 134 (1778).
La Bouscarle de Provence, *Daubent. Pl. Enl.* 655. fig. 2 (1778).
Motacilla sylvia γ. Curruca fulvescens, *Gmel. Syst. Nat.* p. 956 (1788).
Sylvia cetti, *Marm. Mem. Acc. Tor.* xxx. p. 254 (1820); *Temm. Man. d'Orn.* i. p. 194 (1820); *Vieill. Faune Franç.* i. p. 208 (1820); *Lath. Gen. Hist. B.* vii. p. 19 (1823); *Roux, Orn. Prov.* p. 326, pl. 212 (1825); *Savi, Orn. Tosc.* i. p. 273 (1827); *Ménétr. Cat. Rais. Cauc.* p. 33 (1832); *Crespon* (typ. err. *getti*), *Orn. Gard.* p. 118 (1840); *Werner, Atlas, Insectiv.* pl. 30 (1842).
Sylvia sericea, *Natterer, fide Temm. Man. d'Orn.* i. p. 197 (1820); *Lath. Gen. Hist. B.* vii. p. 9 (1823); *Werner, Atlas, Insectiv.* pl. 33 (1842).
Sylvia fulvescens (*Gmel.*), *Vieill. Faune Franç.* i. p. 208 (1820).
Calamoherpe cetti (*Marm.*), *Boie, Isis*, 1822, p. 552.
Curruca sericea (*Temm.*), *Boie, Isis*, 1822, p. 553; *Steph. Shaw's Gen. Zool.* xiii. pt. ii. p. 208 (1826).
Curruca cetti (*Marm.*), *Steph. Shaw's Gen. Zool.* xiii. pt. ii. p. 209 (1826).
Phragmites cetti (*Marm.*), *Blyth, Rennie's Field Nat.* i. p. 439 (1833).
Salicaria cetti (*Marm.*), *Gould, B. Eur.* ii. pl. 114 (1837); *Keys. u. Blas. Wirb. Eur.* p. lv (1840); *Schl. Rev. Crit.* p. xxix (1844); *Linderm. Vög. Griechenl.* p. 95 (1860).
Salicaria sericea (*Temm.*), *Gould, B. Eur.* ii. pl. 115 (1837).
Philomela sericea (*Temm.*), *Swains. Classif. B.* ii. p. 240 (1837).
Cettia altisonans, *Bp. Comp. List B. Eur. & N. Amer.* p. 11 (1838); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 250 (1859).
Cettia sericea (*Temm.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838); *id. Consp.* i. p. 287 (1850); *Loche, Expl. Sci. Algér., Ois.* p. 268 (1867); *Irby, B. Gibr.* p. 93 (1875).
Calamodyta cetti (*Marm.*), *Gray, Gen. B.* i. p. 172 (1848); *Fritsch, Vög. Eur.* p. 159 (1870).
Calamodyta sericea (*Temm.*), *Gray, Gen. B.* i. p. 172 (1848); *Gray, Hand-l. B.* i. p. 209. no. 2954 (1869).
Cettia cetti (*Marm.*), *Degl. Orn. Eur.* i. p. 578 (1849); *Newton, List B. Eur. Blasius*, p. 11 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 524 (1867); *Doderl. Avif. Sicil.* p. 126 (1869).
Bradypterus cetti (*Marm.*), *Cab. Mus. Hein.* i. p. 43 (1850); *Heugl. Orn. N.O.-Afr.* i. p. 274 (1869); *Salvad. Faun. Ital. Ucc.* p. 117 (1871); *Shelley, B. Egypt*, p. 89 (1872); *Dresser, Ibis*, 1876, p. 89; *id. B. Eur.* pt. xlviii. (1876).
Calamoherpe sericea (*Temm.*), *Brehm, Vogelf.* p. 236 (1855).
Potamodus cettii (*Marm.*), *Lilford, Ibis*, 1866, p. 178.
Cettia (Potamodus) orientalis, *Tristram, Ibis*, 1867, p. 79.
Cettia cettioides, *Hume, Stray Feath.* i. p. 194 (1873).
Cettia albiventris, *Severtz. Turkest. Jevotn.* pp. 66, 131 (1873).
Cettia scalenura, *Severtz. Turkest. Jevotn.* pp. 66, 131 (1873).
Cettia stoliczkæ, *Hume, Stray Feath.* ii. p. 520 (1874).
Bradyptetes cettii (*Marm.*), *Blanf. East. Pers.* ii. p. 200 (1876).

General colour of the upper parts rich russet-brown; lores dark

brown; eye-stripe greyish white, indistinct, but passing a short distance behind the eye; wings and tail dark russet-brown, the outside webs edged with rich russet-brown; chin, throat, and centre of belly white, shading into ash-grey on the sides of the breast and into brownish grey on the flanks and under tail-coverts, the latter tipped with white; axillaries and under wing-coverts pale brownish grey with white margins; inner margin of quills pale brown. Bill Phylloscopine; upper mandible dark brown, under mandible pale horn-colour, darker towards the tip; rictal bristles almost obsolete. Wing considerably concaved; fourth, fifth, and sixth primaries nearly equal and longest; second primary about as long as the secondaries; bastard primary rather more than half the length of the second. Tail about equal to the wing, sometimes slightly shorter, sometimes slightly longer, the outside feathers 0·3 to 0·4 inch shorter than the longest. Legs, feet, and claws very pale brown. Length of wing, male 2·6 to 2·15 inches, female 2·25 to 2·15; tail 2·6 to 2·15; culmen 0·56 to 0·48; tarsus 0·92 to 0·76.

The *female* is generally smaller and less subject to vary in size than the male. *After the autumn moult* the upper parts are of a richer russet-brown, almost coffee-coloured, and the white of the underparts is greyer and more restricted. *Birds of the year* are scarcely to be distinguished from adults.

Cetti's Bush-Warbler is a resident on both shores of the Mediterranean, extending eastwards as far as Turkestan. It is found in the south of France, Spain, Algeria, Italy, Greece, Asia Minor, Palestine, and Egypt. In Persia it is probably also a resident; but in Turkestan it is undoubtedly a migrant, apparently breeding there and wintering in Scinde.

a. ♂ ad. sk.	Karij valley, N. Persia, 7000 feet, Aug. 17.	W. T. Blanford, Esq. [C.].
b. ♂ ad. sk.	Palestine.	Canon Tristram [C.].
c. ♀ ad. sk.	Villacidro, Sardinia, May 12 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
d. Sk.	Gibraltar.	Col. Irby [P.].

2. Cettia fortipes.

Horornis fortipes, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 63. no. 850, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 850 (1844, *descr. null.*); *Hodgs. P. Z. S.* 1845, p. 31 (*descr. prim.*); *Blyth, J. A. S. Beng.* xiv. p. 584 (1845); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 64 (1846); *Bp. Consp.* i. p. 290 (1850); *Jerd. B. Ind.* ii. p. 162 (1863).

Drymoica brevicaudata, *Blyth, J. A. S. Beng.* xvi. p. 459 (1847).

Regulus fortipes (*Hodgs.*), *Gray, Gen. B.* i. p. 175 (1848).

Salicaria ——?, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Appendix*, pl. 40. no. 900, and pl. 41. no. 928, *undè*

Horornis assimilis, *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 30 (1863).

Horeites robustipes, *Swinhoe, Ibis*, 1866, p. 398; *Swinhoe, P. Z. S.* 1871, p. 351; *David et Oust. Ois. Chine*, p. 264 (1877).

Prinia robustipes (*Swinh.*), *Gray, Hand-l. B.* i. p. 196. no. 2713 (1869).

Neornis assimilis (*Gray*), *Gray, Hand-l. B.* i. p. 217. no. 3096 (1869); *Blyth & Walden, B. Burm.* p. 105 (1875).
Arundinax davidiana, *Verr. N. Arch. Mus. Bull.* vi. p. 37 (1870); *David et Oust. Ois. Chine*, p. 255 (1877).
Horeites pallidus, *Brooks, J. A. S. Beng.* xli. pt. ii. p. 78 (1872).
Horeites brunnescens, *Hume, Ibis*, 1872, p. 109.
Cettia fortipes (*Hodgs.*), *Seebohm, P. Z. S.* 1878, p. 980; *id. Ibis*, 1879, p. 36.
Cettia assimilis (*Gray*), *Seebohm, Ibis*, 1879, p. 36.
Cettia pallida (*Brooks*), *Seebohm, Ibis*, 1879, p. 36.

General colour of the upper parts russet-brown; lores and the feathers behind the eye dark russet-brown; eye-stripe pale brown, indistinct, and soon losing itself behind the eye; wings and tail brown, the outside webs edged with russet-brown. The underparts are pale buffish brown, shading into buffish brown on the breast and flanks; axillaries and under wing-coverts pale yellow; inner margin of quills greyish white. Bill Sylviine rather than Phylloscopine, dark brown, paler at the base of the under mandible; rictal bristles fairly developed. Wing short and blunt, the fourth to the seventh primaries nearly equal and longest; second primary shorter than any of the succeeding ones; bastard primary more than half the length of the second, measuring 0·55 to 0·65 inch. Tail generally equal in length to the wing, sometimes a trifle shorter, and occasionally a trifle longer; outside feathers 0·45 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·28 to 1·88 inches, tail 2·21 to 1·86, culmen 0·56 to 0·48, tarsus 0·83.

There does not appear to be any difference in the colour of the plumage between *male* and *female*, nor is it known that any change takes place *after the spring moult*. *Birds of the year* have the upper parts paler and more tawny in colour, and the underparts of an almost uniform pale buffish brown, only very slightly darker on the breast, and scarcely at all so on the flanks.

The types of *H. robustipes*, Swinh., from Formosa, in my collection, have the claw of the hind toe very slightly larger than is usual in Indian birds; probably only an individual variation.

So far as is known, Hodgson's Bush-Warbler is confined to the Himalayas from Cashmere to Assam, Western China, and the island of Formosa. In all localities it is doubtless a partial migrant, breeding at high elevations above the level of winter snow and descending lower into the valleys during the cold season.

a. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Horornis fortipes*, Hodgs.)
b, *c*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Types of *Horornis assimilis*, Gray.)
d–*o*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
p. Ad. sk.	Darjeeling.	W. Fotheringham, Esq. [P.].
q. Ad. sk.	India (*Capt. Marshall*).	R. B. Sharpe, Esq. [P.].
r. Ad. sk.	Kashgar (*Dr. Bellew*).	India Museum.

3. Cettia flavolivacea.

Neornis flavolivacea, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 61. fig. 1, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 853 (1844, *descr. null.*); *Hodgs. per Blyth, J. A. S. Beng.* xiv. pt. ii. p. 590 (1845, *descr. prim.*); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* pp. 66, 152 (1846); *Blyth, Cat. B. Mus. As. Soc.* p. 144 (1849); *Bp. Consp.* i. p. 290 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 324 (1854); *Jerdon, B. Ind.* ii. p. 188 (1863); *Blyth & Wald. B. Burm.* p. 104 (1875).

Neornis cacharensis, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 61. fig. 2, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 855 (1844, *descr. null.*); *Hodgs. per Blyth, J. A. S. Beng.* xiv. p. 590 (1845); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 67 (1846).

Sylvia flavolivacea (*Hodgs.*), *Gray, Gen. B.* i. p. 174 (1848); *Gray, Hand-l. B.* i. p. 217. no. 3094 (1869).

Cettia flavolivacea (*Hodgs.*), *Seebohm, Ibis*, 1879, p. 36.

General colour of the upper parts dark brownish green, slightly paler on the rump; lores and the feathers behind the eye brown; eye-stripe buffish yellow, rather indistinct, but extending behind the eye; wings and tail brown, the outside webs margined with brownish green; chin, throat, and centre of belly deep yellow, shading into brownish yellow on the breast, flanks, thighs, and under tail-coverts; axillaries and under wing-coverts bright yellow; inner margin of quills nearly white. Bill Phylloscopine, dark brown, under mandible pale at the base; rictal bristles well developed. Wing concaved; fourth, fifth, and sixth primaries nearly equal and longest; second primary slightly shorter than the secondaries; first primary more than half the length of the second. Tail about equal to the wing, sometimes slightly longer, sometimes slightly shorter, the outside feathers 0·5 to 0·45 shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·15 to 1·9 inches, tail 2·2 to 1·9, culmen 0·51 to 0·48, tarsus 0·9.

Males (*N. flavolivacea*, Hodgs.) are supposed to be slightly larger than females (*N. cacharensis*, Hodgs.). In some skins (Hodgs. MS. Drawings, Appendix, pl. 50. no. 976) the upper parts are slightly darker and browner. I take this to be the plumage *after the autumn moult*, and possibly also of *birds of the year*.

The Himalayan Bush-Warbler breeds at high altitudes on the Himalayas from Nepal to Assam, descending towards the plains during the cold season.

a, b. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Types of *Neornis flavolivacea*, Hodgs.)
c. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Neornis cacharensis*, Hodgs.)
d–m. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
n. Ad. sk.	India.	Capt. Stackhouse Pinwill [P.].

4. Cettia pallidipes.

Phylloscopus pallidipes, *Blanf. J. A. S. Beng.* xli. pt. ii. p. 162, pl. vii. (1872).
Horeites sericea, *Walden, Blyth & Wald. B. Burm.* p. 119 (1875, *nec Temm.*).
Cettia pallidipes (*Blanf.*), *Seebohm, Ibis*, 1879, p. 36.

General colour of the upper parts olive-brown; lores and the feathers behind the eye dark olive-brown; eye-stripe greyish white, very distinct and reaching to the nape; wings and tail brown, with a slight shade of olive, most conspicuous on the outside webs of the feathers. Underparts nearly white, slightly suffused with brown on the breast, and shading into pale olive-brown on the flanks and thighs; axillaries and under wing-coverts nearly white; inner margin of quills pale brown. Bill Phylloscopine, upper mandible dark brown, under mandible pale horn-colour; rictal bristles obsolete. Wing somewhat concaved; fourth, fifth, and sixth primaries nearly equal and longest; second primary shorter than the secondaries, first primary more than half the length of the second. Tail shorter than the wing, the outside feathers 0·15 inch shorter than the longest. Legs, feet, and claws very pale flesh-colour. Length of wing 2·05 inches, tail 1·7, culmen 0·51, tarsus 0·81.

Blanford's Bush-Warbler has only been recorded from Sikkim and Assam, where it is doubtless a partial migrant, ascending to a considerable elevation to breed.

a. Ad. sk. Sikkim. L. Mandelli, Esq. [P.].
(Type of *Horeites pallidipes*, Blanf.)

Cettia cantans and Cettia minuta.

These forms apparently interbreed, and produce intermediate forms, in spite of their insular distribution. The long-tailed olive form is the only one found in Japan. I possess, however, an example from Formosa. Birds from the latter island are generally slightly smaller, decidedly browner, and shorter in the tail. I have, however, a typical example of this intermediate form from Chefoo, opposite Japan, on the mainland, whilst I have other examples from Formosa approaching still nearer to typical *minuta*. The latter form is found at Amoy, on the mainland, down to Hainan, and is the smallest, agreeing with the typical Formosan form in the length of the tail, but being still browner in colour, shading into rich russet-brown on the forehead. No better examples of incipient species could perhaps be found.

The synonymy of the Japanese form is as follows:—

5. Cettia cantans.

Salicaria cantans, *Temm. et Schl. Fauna Japon.* p. 51, pl. xix. (1847); *Swinhoe, Ibis*, 1866, p. 397.
Salicaria cantillans, *Temm. et Schl. Fauna Japon.* p. 52, pl. xx. (1847).

Calamodyta cantans (*Temm. et Schl.*), *Gray, Gen. B.* i. p. 172 (1848); *id. Hand-l. B.* i. p. 207. no. 2926 (1869).
Calamodyta cantillans (*Temm. et Schl.*), *Gray, Gen. B.* i. p. 172 (1848); *id. Hand-l. B.* i. p. 207. no. 2931 (1869).
Calamoherpe cantans (*Temm. et Schl.*), *Bp. Consp.* i. p. 285 (1850).
Calamoherpe cantillans (*Temm. et Schl.*), *Bp. Consp.* i. p. 285 (1850).
Herbivox cantans (*Temm. et Schl.*), *Swinhoe, P. Z. S.* 1871, p. 353.
Homochlamys cantans (*Temm. et Schl.*), *Salvad. Ibis*, 1873, p. 180.
Cettia cantans (*Temm. et Schl.*), *Seebohm, Ibis*, 1879, p. 36.

General colour of the upper parts olive-brown, suffused with russet-brown on the rump and upper tail-coverts; lores and the feathers behind the eye brown; eye-stripe greyish white, indistinct, but passing over the eye almost to the nape; wings and tail brown, the outside webs edged with russet-brown. Underparts nearly white, slightly suffused with pale buffish brown on the breast, flanks, and under tail-coverts; axillaries very pale yellow; under wing-coverts white; inner margin of quills greyish white. Bill Sylviine; upper mandible dark brown, under mandible pale horn-colour, darker towards the tip; rictal bristles moderately developed. Wing moderately rounded; fourth, fifth, and sixth primaries nearly equal and longest; second primary about equal to the tenth; bastard primary rather more than half the length of the second primary. Tail equal to or longer than the wing, the outside feathers 0·25 to 0·35 inch shorter than the longest. Legs, feet, and claws pale horn-colour. Length of wing 2·65 to 2·15 inches, tail 2·75 to 2·3, culmen 0·63 to 0·55, tarsus 1 to 0·83.

The *female* differs from the male only in being smaller in size. *After the autumn moult* the olive-brown of the upper parts has a slight shade of rufous upon it, and the pale buffish brown of the breast, flanks, and under tail-coverts is darker and more olive in tone. The plumage of *birds of the year* is apparently unknown.

The Japanese Bush-Warbler appears to be confined to Japan and Formosa. It breeds on the mountains near Yokohama, and winters in the plains.

a. Ad. sk.	Yokohama, Japan.	H. Pryer, Esq. [C.].
b. Ad. st.	Japan.	Purchased.

The synonymy of the intermediate form is as follows:—

Cettia cantans minuta (*Temm. et Swinh.*).

Calamoherpe minuta (*Swinh.*), *Swinhoe, Ibis*, 1863, p. 306 (*partim*).
Herbivox minuta (*Swinh.*), *Swinhoe, P. Z. S.* 1871, p. 353 (*partim*).
Homochlamys minutus (*Swinh.*), *Salvad. Ibis*, 1873, p. 180 (*partim*); *David et Oust. Ois. Chine*, p. 244 (1877, *partim*).
Arundinax davidianus, *Verr. apud Swinhoe, Ibis*, 1874, p. 438.

General colour of the upper parts olive-brown, sometimes shading into russet-brown on the forehead. Tail equal to or shorter than the wing. Length of wing 2·56 to 2·35 inches, tail 2·35 to 2·25, culmen 0·6 to 0·55, tarsus 0·98 to 0·88.

The Formosan Bush-Warbler has been found at Chefoo, on the

mainland opposite Japan, but is principally known as a resident in the island of Formosa.

a, *b*. Ad. sk.	Formosa, Feb. and March.		R. Swinhoe, Esq. [C.].

The synonymy of the Hainan form is as follows:—

6. Cettia minuta.

Arundinax minutus, *Swinhoe, Ibis*, 1860, p. 52.
Arundinax miniatus, *Swinhoe, Ibis*, 1860, p. 357.
Calamoherpe minuta (*Swinh.*), *Swinhoe, Ibis*, 1863, p. 306 (*partim*); *id. Ibis*, 1870, p. 345.
Calamodyta minuta (*Swinh.*), *Gray, Hand-l. B.* i. p. 207. no. 2934 (1869).
Herbivox minuta (*Swinh.*), *Swinhoe, P. Z. S.* 1871, p. 353 (*partim*).
Homochlamys minutus (*Swinh.*), *Salvad. Ibis*, 1873, p. 180 (*partim*); *David et Oust. Ois. Chine*, p. 244 (1877, *partim*).

General colour of the upper parts russet-brown, inclining to olive on the back, slightly paler on the rump and upper tail-coverts, and shading into rich russet-brown on the forehead; lores and behind the eye dark brown; eye-stripe pale buffish white, indistinct, and not extending far behind the eye; wings and tail brown, the outside webs of the feathers edged with russet-brown. Chin, throat, and centre of belly nearly white, shading into pale buffish brown on the breast, flanks, and under tail-coverts; thighs brown; axillaries and under wing-coverts silky white; inner margin of quills pale brown. Bill rather stout; upper mandible dark brown, under mandible pale horn-colour, darker towards the tip; rictal bristles moderately developed. Wing slightly concaved, with the fourth and fifth primaries nearly equal and longest; second primary about equal in length to the secondaries; bastard primary slightly more than half the length of the second. Tail shorter than the wing, the outside feathers 0·35 to 0·45 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·53 to 2·2 inches, tail 2·35 to 2·0, culmen 0·65 to 0·56, tarsus 1·0 to 0·9.

The *female* appears to have rather less of the rich russet-brown on the forehead. *After the autumn moult* the slight shade of olive on the back disappears, and the russet-brown on the forehead is much richer in colour, and extend more onto the crown. The buffish brown of the breast, flanks, and under tail-coverts also becomes darker. The plumage of *birds of the year* appears to be unknown.

The Hainan Bush-Warbler breeds in South China and Hainan.

a Ad. sk.	China (*Whitely*).		R. B. Sharpe, Esq. [P.].

7. Cettia canturiens.

Arundinax canturians, *Swinhoe, Ibis*, 1860, p. 52.
Lusciniopsis canturians, *Swinhoe, Ibis*, 1861, p. 32.
Calamoherpe canturians, *Swinhoe, Ibis*, 1863, p. 306.
Calamodyta canturians (*Swinh.*), *Gray, Hand-l. B.* i. p. 207. no. 2933 (1869).

Homochlamys luscinia, *Salvad. Atti Acc. Sc. Tor.* v. p. 511 (1870).
Malacopteron luscinia, *Finsch, fide Salvad. loc. cit.* (1870).
Herbivox canturiens, *Swinhoe, P. Z. S.* 1871, p. 353.
Homochlamys canturiens (*Swinh.*), *Salvad. Ibis*, 1873, p. 180; *David et Oust. Ois. Chine*, p. 243 (1877).
Cettia canturiens (*Swinh.*), *Seebohm, Ibis*, 1879, p. 36.

General colour of the upper parts russet-brown, inclining to olive on the back, slightly more russet on the rump and upper tail-coverts, and shading into rich russet-brown on the forehead; lores and behind the eye dark brown; eye-stripe pale buffish white, somewhat indistinct, and extending almost to the nape; wings and tail brown, the feathers edged with russet-brown on their outside webs. Chin, throat, and centre of belly nearly white, shading into buffish brown on the breast, flanks, and under tail-coverts; thighs brown; axillaries and under wing-coverts nearly white; inner margin of quills pale buffish brown. Bill rather stout; upper mandible dark brown, under mandible pale horn-colour, darker towards the tip; rictal bristles moderately developed. Wing slightly concaved, with the fourth and fifth primaries nearly equal and longest; second primary about equal in length to the secondaries; bastard primary slightly more than half the length of the second. Tail shorter than the wing, the outside feathers 0·4 to 0·5 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 3·1 to 2·8 inches, tail 2·9 to 2·65, culmen 0·7 to 0·64, tarsus 1·1.

There does not appear to be any difference between the sexes. *After the autumn moult* the slight shade of olive on the back disappears, and the russet-brown of the forehead is richer in colour and extends more onto the crown. The breast, flanks, and under tail-coverts are slightly darker and more olive. All these characteristics of the autumn plumage are still more pronounced in *birds of the year*.

The Chinese Bush-Warbler breeds in North China, and winters in South China. In Formosa it is said to be resident, probably breeding on the mountains and wintering in the plains.

a, *b*. Ad. sk. Formosa, Dec. and Jan. R. Swinhoe, Esq. [C.].

8. Cettia squamiceps.

Tribura squamiceps, *Swinhoe, P. Z. S.* 1863, p. 292; *id. Ibis*, 1866, p. 397; *id. P. Z. S.* 1871, p. 355; *id. Ibis*, 1874, p. 155.
Calamodyta squamiceps (*Swinh.*), *Gray, Hand-l. B.* i. p. 210. no. 2978 (1869).
Horornis squamiceps (*Swinh.*), *Swinhoe, Ibis*, 1875, p. 146; *David et Oust. Ois. Chine*, p. 240 (1877).
Urosphena squamiceps (*Swinh.*), *Swinhoe, Ibis*, 1877, p. 205, pl. [illegible]; *Hume and Davison, Stray Feath.* vi. p. 343 (1878).

General colour of the upper parts uniform chocolate-brown; eyebrow stripe buffish white, very clearly defined and extending to the nape; lores and a stripe behind the eye, between the eye-stripe and the ear-coverts, chocolate-brown; ear-coverts and the whole of the underparts buffish white, shading into buffish brown on the breast

J. G. Keulemans del. Mintern Bros. imp.

Cettia brunneifrons.

Homochlamys luscinia, *Salvad. Atti Acc. Sc. Tor.* v. p. 511 (1870).
Malacopteron luscinia, *Finsch, fide Salvad. loc. cit.* (1870).
Herbivox canturiens, *Swinhoe, P. Z. S.* 1871, p. 353.
Homochlamys canturiens (*Swinh.*), *Salvad. Ibis*, 1873, p. 180; *David et Oust. Ois. Chine*, p. 243 (1877).
Cettia canturiens (*Swinh.*), *Seebohm, Ibis*, 1879, p. 36.

General colour of the upper parts russet-brown, inclining to olive on the back, slightly more russet on the rump and upper tail-coverts, and shading into rich russet-brown on the forehead; lores and behind the eye dark brown; eye-stripe pale buffish white, somewhat indistinct, and extending almost to the nape; wings and tail brown, the feathers edged with russet-brown on their outside webs. Chin, throat, and centre of belly nearly white, shading into buffish brown on the breast, flanks, and under tail-coverts; thighs brown; axillaries and under wing-coverts nearly white; inner margin of quills pale buffish brown. Bill rather stout; upper mandible dark brown, under mandible pale horn-colour, darker towards the tip; rictal bristles moderately developed. Wing slightly concaved, with the fourth and fifth primaries nearly equal and longest; second primary about equal in length to the secondaries; bastard primary slightly more than half the length of the second. Tail shorter than the wing, the outside feathers 0·4 to 0·5 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 3·1 to 2·8 inches, tail 2·9 to 2·65, culmen 0·7 to 0·64, tarsus 1·1.

There does not appear to be any difference between the sexes. *After the autumn moult* the slight shade of olive on the back disappears, and the russet-brown of the forehead is richer in colour and extends more onto the crown. The breast, flanks, and under tail-coverts are slightly darker and more olive. All these characteristics of the autumn plumage are still more pronounced in *birds of the year*.

The Chinese Bush-Warbler breeds in North China, and winters in South China. In Formosa it is said to be resident, probably breeding on the mountains and wintering in the plains.

a, b. Ad. sk. Formosa, Dec. and Jan. R. Swinhoe, Esq. [C.].

8. Cettia squamiceps.

Tribura squameiceps, *Swinhoe, P. Z. S.* 1863, p. 292; *id. Ibis*, 1866, p. 397; *id. P. Z. S.* 1871, p. 355; *id. Ibis*, 1874, p. 155.
Calamodyta squamiceps (*Swinh.*), *Gray, Hand-l. B.* i. p. 210. no. 2978 (1869).
Horornis squamiceps (*Swinh.*), *Swinhoe, Ibis*, 1875, p. 146; *David et Oust. Ois. Chine*, p. 240 (1877).
Urosphena squamiceps (*Swinh.*), *Swinhoe, Ibis*, 1877, p. 205, pl. i.; *Hume and Davison, Stray Feath.* vi. p. 343 (1878).

General colour of the upper parts uniform chocolate-brown; eye-ring and stripe buffish white, very clearly defined and extending to the nape; lores and a stripe behind the eye, between the eye-stripe and the ear-coverts, chocolate-brown; ear-coverts and the whole of the underparts buffish white, shading into buffish brown on the breast

White's Ground-Thrush breeds in South-central and South-eastern Siberia and Northern China, straggling occasionally but accidentally into Europe on migration, and wintering in South Japan, South China, and the Philippine Islands.

a.	Ad. sk.	Japan.	Purchased.
b.	Ad. sk.	Japan.	Purchased.
c.	Ad. sk.	Shanghai.	Shanghai Mus. [P.].
d.	Ad. sk.	Yokohama (*Pryer*).	H. Seebohm, Esq. [P.].
e.	Skeleton.	England (*Warwick*).	Purchased.

2. Geocichla hancii.

Oreocincla hancii, *Swinhoe, Ibis*, 1863, p. 275; *id. Ibis*, 1863, p. 304.

Oreocincla varia (*Pallas*), *apud Swinhoe, P. Z. S.* 1871, p. 367 (*partim*).

This species differs from the preceding in having the general colour of the upper parts greyish brown instead of ochraceous brown. It is also a somewhat larger bird, measuring as under:—Length of wing 6·6 inches, tail 4·6, culmen 1·15, tarsus 1·5. The number of tail-feathers is fourteen.

Nothing is known of its changes of plumage.

The Formosan Ground-Thrush is supposed to be peculiar to the island of Formosa, where it is probably a resident.

The British Museum does not possess an example of this species. The type is in the Swinhoe collection in my possession, a second skin is in the Tweeddale collection in the possession of Capt. Wardlaw Ramsay, and a third in the Museum of the Jardin des Plantes in Paris.

3. Geocichla horsfieldi. (Plate X.)

Turdus varius, *Pallas, apud Horsfield, Trans. Linn. Soc.* xiii. p. 149 (1820).

Turdus lunulatus, *Lath. apud Sund. Vet. Ak. Handl.* 1840, p. 37.

Oreocincla horsfieldi, *Bonap. Rev. et Mag. Zool.* May 1857, p. 205 (1857).

Oreocincla malayana, *Sund. Journ. Orn.* May 1857, p. 161. (*The objectionable habit of antedating practised by this Journal makes it probable that Bonaparte's name has the priority in actual date of publication.*)

Turdus malayanus (*Sund.*), *Gray, Hand-l. B.* i. p. 254. no. 3688 (1869).

This species differs from the two preceding in being a decidedly smaller bird. The general colour of the upper parts is a rich russet-brown, and the subterminal bands across the feathers are confined to the feathers of the head and neck. It most resembles *G. heinii* (Cab.) in colour, but has the subterminal bands on the head more marked, and differs also from that species in having fourteen tail-feathers. The second primary is intermediate in length between the fifth and sixth, or sixth and seventh. Length of wing 5·4 to 5·25 inches, tail 4·0 to 3·4, culmen 1·22 to 1·12, tarsus 1·35.

Nothing is known of any variations of colour which may be attributable to sex, season, or age.

The Javan Ground-Thrush has hitherto only been found in Java, where it is supposed to be a resident.

a. Ad. sk. Java (*Horsfield*). India Mus.
(Type of *Turdus varius*, Pall. apud Horsf., *Oreocincla horsfieldi*, Bonap. and *Oreocincla malayana*, Sund.)

Other examples of this species are in the Museums of Leyden, Berlin, and Hamburg, and in my own collection.

4. Geocichla dauma.

Dauma Thrush, *Lath. Gen. Syn. Suppl.* i. p. 145 (1787).
Turdus dauma, *Lath. Ind. Orn.* i. p. 362 (1790); *Gray, Gen. B.* i. p. 218 (1847); *Gray, Hand-l. B.* i. p. 254. no. 3691 (1869).
Oreocincla parvirostris, *Gould, P. Z. S.* 1837, p. 136.
Turdus varius, *Horsf. apud Jerd. Madras Journ.* p. 254 (1839).
Turdus whitei, *Eyton apud Blyth, Ann. Nat. Hist.* xii. p. 98 (1843), *apud Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 80 (1846).
Oreocincla dauma, *Blyth, J. A. S. Beng.* xvi. p. 142 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 160 (1849); *Cab. Mus. Hein.* i. p. 6 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 193 (1854); *Sund. Journ. Orn.* 1857, p. 161; *Jerd. B. Ind.* i. p. 533 (1862); *Ball, Str. F.* 1874, p. 408; *Blyth & Wald. B. Burm.* p. 100 (1875); *Hume, Str. F.* 1875, p. 115; *Armstrong, Str. F.* 1876, p. 323; *Hume & Davison, Str. F.* vi. p. 256 (1878).

In the *adult male in spring plumage* the general colour of the upper parts is ochraceous brown, each feather having a transverse terminal crescent-shaped black band; most of the feathers have pale shafts and a more or less distinct ochraceous transverse subterminal band, very conspicuous on the head and neck; lores nearly white; no trace of eye-stripe; wing-coverts and innermost secondaries shading from dark olive-brown on the inside webs to ochraceous brown on the outside webs, but, with the exception of the primary-coverts, wanting the black terminal bands; quills brown, the outside webs ochraceous; four central and terminal half of the two outside tail-feathers ochraceous brown, the remaining three on each side very dark olive-brown; four outside tail-feathers on each side more or less distinctly tipped with white, and all more or less obscurely barred. Underparts white, with a more or less distinct tinge of ochraceous on the breast, each feather with a transverse terminal crescent-shaped black band, nearly obsolete on the chin, centre of belly, and under tail-coverts; axillaries, basal half white, terminal half black; under wing-coverts, basal portion black, terminal portion white; inner margin of quills very pale buff. Bill dark brown above, basal half of under mandible pale brown. Wing with the third and fourth primaries nearly equal and longest; second primary generally half an inch longer than the sixth, but a trifle shorter than the fifth; bastard primary 1·1 to 0·7 inch. Legs,

feet, and claws pale flesh-colour. Length of wing 5·8 to 5·3 inches, tail 4·4 to 3·6, culmen 1·1 to 1·0, tarsus 1·32 to 1·2.

It is not known that any change in the colour of the plumage is attributable to sex or season. *Birds of the year* appear to be unknown. *Young in first plumage* are more ochraceous in colour both above and below, and the spots are less distinctly crescentic.

Examples from the North-west Himalayas are much less ochraceous in colour, and might almost be considered subspecifically distinct, in which case they would stand as *G. parvirostris* (Gould).

The Himalayan Ground-Thrush breeds throughout the Himalayas, descending to the plains in the cold season, where it has been found as far south as Central India and Tenasserim.

a. Ad. sk.	Himalayas.	Jno. Reeves, Esq. [P.].
b. Ad. sk.	Himalayas.	Purchased.
c, *d*. Ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
e. Ad. sk.	Almorah.	Capt. Stackhouse Pinwill [P.].
f. Ad. sk.	Kumaon.	India Museum.
g. Juv. sk.	Darjeeling.	Purchased.
h. Ad. sk.	Kamptee.	Dr. R. B. Hinde [P.].
i–*o*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
p. Sternum.	Nepal.	B. H. Hodgson, Esq. [P.].

5. Geocichla lunulata.

Lunulated Thrush, *Lath. Gen. Syn. Suppl.* ii. p. 184 (1801).

Turdus lunulatus, *Lath. Ind. Orn. Suppl.* p. xlii (1801); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 236 (1818); *Gray, Gen. B.* i. p. 218 (1847); *Gray, Hand-l. B.* i. p. 254. no. 3689 (1869).

Turdus varius, *Pall. apud Vigors & Horsf. Tr. Linn. Soc.* xv. p. 218 (1826).

Oreocincla novæ-hollandiæ, *Gould, P. Z. S.* 1837, p. 145.

Oreocincla lunulata (*Lath.*), *Gould, B. Austr.* iv. pl. 7 (1848); *Reichenb. Vög. Neuholl.* pp. 217, 209 (1849); *Cab. Mus. Hein.* i. p. 6 (1850); *Sund. Journ. Orn.* 1857, p. 161; *Gould, Handb. B. Austr.* i. p. 439 (1865, *partim*); *Ramsay, Tr. Linn. Soc. N. S. W.* ii. p. 187 (1878).

In the *adult male in spring plumage* the general colour of the upper parts is olive-brown, each feather having a transverse terminal crescent-shaped black band; most of the feathers have pale shafts, and many of them have an obscure pale transverse subterminal band; lores nearly white; behind the eye a trace of eye-stripe; wing-coverts and innermost secondaries shading from dark olive-brown on the outside webs to olive-brown on the inside webs, but, with the exception of the primary-coverts, wanting the black terminal bands; quills brown, the outside webs olive-brown; four central and terminal half of the two outside tail-feathers olive-brown, the remaining three on each side dark olive-brown, very dark on the inside web; outer tail-feathers tipped with white, and several of the others more or less obscurely tipped with pale ochraceous, all more or less distinctly barred. Underparts white, with a tinge of ochraceous on the breast, each feather with a transverse terminal crescent-shaped black band, nearly obsolete on the chin, centre of belly, and under tail-coverts; axillaries, basal

half white, terminal half black; under wing-coverts, basal portion black, terminal portion white; basal half of secondaries and basal portion of many of the primaries pale buff. Bill brown above, basal half of under mandible yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary a trifle shorter than the sixth, bastard primary 1·15 to 1·0 inch. Legs, feet, and claws pale yellowish brown. Length of wing 5·5 to 5·1 inches, tail 4·6 to 4·1, culmen 1·2 to 1·1, tarsus 1·3 to 1·25.

Nothing appears to be known of the changes in the colour of the plumage caused by age, sex, or season.

The South-Australian Ground-Thrush appears to be confined to the south-east of Australia, ascending the hills to breed and wintering in the plains.

a. Ad. st.	S.E. Australia.	J. Gould, Esq. [C.].
b. Ad. st.	S.E. Australia.	Purchased.
c, *d*. Ad. sk.	S.E. Australia.	Sir G. Grey [P.].
e. Ad. sk.	S.E. Australia.	Australian Museum.
f. Ad. sk.	S.E. Australia.	Purchased.
g. Ad. sk.	S.E. Australia.	F. Godman and O. Salvin, Esqrs. [P.].

6. Geocichla macrorhyncha.

Oreocincla macrorhyncha, *Gould, P. Z. S.* 1837, p. 145; *Cab. Journ. Orn.* 1872, p. 237.
Turdus macrorhynchus (*Gould*), *Gray, Gen. B.* i. p. 218 (1847).
Oreocincla lunulata (*Lath.*), *apud Gould, Handb. B. Austr.* i. p. 439 (1865, *partim*).

This is a fairly well-defined species, and combines the characters of *G. lunulata* and *G. papuensis*, from either of which it is, however, easily distinguishable. Curiously enough, it appears to come nearest in coloration to *G. nilgiriensis*. The general colour of the upper parts is russet-brown, both on the head and back, as well as on the rump, with the usual black crescentic tips to the feathers, and the usual markings on the wings and tail. As in the last mentioned species, the subterminal ochraceous spots are more developed than in the two first mentioned species, especially on the head and nape. From *G. papuensis* and *G. heinii* it may at once be distinguished by the outside tail-feathers, which are narrowly, not broadly, tipped with white. From *G. nilgiriensis* it may be best distinguished by the decidedly buff basal portion of the inner webs of the secondaries and many of the primaries, which in the South-Indian species are white. Bill dark brown, paler at the base of the under mandible. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 1·2 to 1·1 inch. Length of wing 5·3 to 5·1 inches, tail 4·4 to 4·25, culmen 1·2, tarsus 1·45 to 1·35.

Nothing is known of the changes of plumage which this species undergoes.

The Tasmanian Ground-Thrush is peculiar to the island of Van Diemen's Land, where it is a resident.

a, *b*, *c*. Ad. sk.	Tasmania.	Ronald Gunn, Esq. [P.].

7. Geocichla heinii.

Oreocincla heinii, *Cab. Mus. Hein.* i. p. 6 (1850, *locality erroneously given as Japan*); *id. Journ. Orn.* 1872, p. 237.
Oreocincla iodura, *Gould, Ann. Nat. Hist.* 1872, ix. p. 401.
Turdus iodurus (*Gould*), *Newt. ed. Yarr. Br. B.* i. p. 256 (1872); *Giebel, Thes. Orn.* iii. p. 713 (1877).

This species, though a perfectly good one, is very nearly allied to the preceding, with which it has been generally confused. It differs in being a decidedly smaller bird with a longer second primary. The markings on the plumage, both of the upper and under parts, appear to be precisely the same, except that the white tip on the outside tail-feather of the smaller bird extends for an inch or more instead of being about a quarter of an inch in extent. The general colour of the upper parts as far as the centre of the back is olive-brown in both species, but in the smaller one it shades into russet-brown on the rump, upper tail-coverts, and tail. Wing with the third and fourth primaries nearly equal and longest, second primary between the fifth and sixth. Length of wing 4·9 to 4·7 inches, tail 3·6 to 3·4, culmen 1·1 to 1·0, tarsus 1·18 to 1·15.

Nothing is known of the changes in the colour of the plumage attributable to sex, age, or season.

The North-Australian Ground-Thrush appears to be found throughout Eastern Australia as far south as Moreton Bay, probably breeding in the mountains and migrating to the plains during the cold season.

a. Ad. st.	N.E. Australia.	J. Gould, Esq. [C.].
b. Ad. sk.	N.E. Australia. (Type of *T. varius*, Pall., apud Vig. and Horsf.)	Linn. Soc. [P.].
c. Ad. sk.	N.E. Australia.	H. Seebohm, Esq. [P.].
d. Ad. sk.	Queensland.	Australian Museum [P.].

8. Geocichla nilgiriensis.

Turdus varius, *Pall. apud Jerd. Madr. Journ.* xiii. p. 168 (1844).
Oreocincla neilgherriensis, *Blyth, J. A. S. Beng.* xvi. p. 141 (1847); *id.** *Cat. B. Mus. As. Soc.* p. 160 (1849); *Morgan**, *Ibis*, 1875, p. 320; *Hume, Stray Feath.* 1876, p. 399.
Turdus nilgiriensis (*Blyth*), *Gray, Hand-l. B.* i. p. 254. no. 3692 (1869).

This species is tolerably well defined, and appears to be intermediate between *G. dauma* and *G. heinii*. The general colour of the upper parts is russet-brown, with the usual black crescentic tips to the feathers, and the usual markings on the wings and tail. The feathers have almost as few traces of the pale subterminal spots as those of *G. heinii* and *G. lunulata*, except on the head, where

* Spelling altered to *nilgiriensis*.

they are, however, chestnut-brown instead of ochraceous, as in *G. dauma*. It differs also from *G. heinii* in having the pale tips to the outside tail-feathers very small and obscure. The breast is very slightly suffused with buff, and the terminal black bands to the feathers are almost semilunar; the basal portion of the inner webs of the secondaries and many of the primaries is white, or the last primary on which the white occurs showing a buff tint. Bill dark brown, paler at the base of the under mandible. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary between the fifth and sixth, bastard primary 0·9 inch. Legs, feet, and claws pale brown. Length of wing 5·2 inches, tail 3·7, culmen 1·23, tarsus 1·12.

Nothing is known of the difference between the sexes, or between summer and winter plumage. *Young in first plumage* have the chestnut-brown subterminal spots on most of the feathers of the upper parts, the breast is more suffused with buff, and the terminal bars on the underparts are more diffused over the whole surface and still less crescentic.

The Neilgherrie Ground-Thrush appears to be confined to the mountain-ranges of South-west India, where it is a resident, probably migrating only to the neighbouring valleys during the cold season.

The British Museum does not possess an example of this species. The only specimens in Europe appear to be an adult and young in first plumage in the Tweeddale collection, in the possession of Capt. Wardlaw Ramsay.

9. Geocichla papuensis. (Plate IX.)

General colour of the upper parts russet-brown, each feather becoming slightly more ochraceous towards the tip, where it is terminated by a narrow black crescentic band, the feathers of the crown and nape having conspicuous subterminal ochraceous spots (a character which distinguishes this species from *G. heinii*); the wing-coverts, wings, and tail-feathers have the usual markings of the subgeneric group of *Oreocinclæ*, but the inner web of the outside tail-feather on each side is white at the tip for an inch and a half (a character which distinguishes this species from all its known near allies except *G. heinii*). The underparts are white, suffused with buff on the upper throat and breast, each feather having a narrow black crescentic terminal band, except on the chin, centre of belly, and under tail-coverts. Like all typical species of the genus *Geocichla*, the basal half of the inner webs of the secondaries and of many of the primaries is pale buff; the basal half of the axillaries and the terminal half of the wing-coverts are white, whilst the terminal half of the axillaries and the basal half of the wing-coverts are black. Bill dark brown, pale at the base of the under mandible. Wing with third, fourth, and fifth primaries nearly equal and longest; second primary about equal in length to the sixth; bastard primary 0·9 inch. Legs, feet, and claws

J. G. Keulemans del. Mintern Bros. imp.

Geocichla papuensis.

upper mandible dark brown, under mandible pale horn-colour; rictal bristles obsolete. Wing rather long, flat, and pointed; third primary longest; second primary sometimes slightly longer, sometimes slightly shorter than the fourth; bastard primary very small, even in birds of the year shorter than the primary-coverts. Tail shorter than the wing, outside feathers 0·8 to 1·0 inch shorter than the longest, but slightly longer than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 3·2 to 2·9 inches, tail 3·0 to 2·6, culmen 0·8 to 0·7, tarsus 1·15 to 1·05.

In a *female* in my collection from Amoy, and in another from Hakodadi, the pale ash-grey on the chin, throat, and breast is replaced on the chin and upper throat by pale brownish white, shading into brown on the lower throat, which becomes more ochraceous on the breast. It is possible, however, that the fully adult female may be found to be similar to the male. *After the autumn moult* the ash-grey of the breast is less violet in colour. In *birds of the year* the whole of the plumage is suffused with yellow, causing the general colour of the upper parts to be more olive-brown than russet-brown, and the chin, throat, and centre of belly to be buffis yellow. In this plumage, which of course continues until the spring moult, becoming duller by the usual abrasion which takes place during the winter, it is the *A. fasciolatus* of Gray and the *C. subflavescens* of Elliot.

Gray's Grasshopper Warbler breeds in South-eastern Siberia, probably throughout the valley of the Amoor from Lake Baical to the Pacific and North Japan. It passes along the coast of China on migration, and winters in the islands of the Malay archipelago (Gilolo, Morty, Batchian, &c.).

a. ♂ juv. sk.	Batchian.	A. R. Wallace, Esq. [C.]. (Type of *Acrocephalus fasciolatus*, Gray.)
b, *c*. Juv. sk.	Batchian.	A. R. Wallace, Esq. [C.].
d. Ad. sk.	Gilolo.	A. R. Wallace, Esq. [C.]. (Type of *Acrocephalus insularis*, Wallace.)
e. Juv. sk.	Morty Is.	A. R. Wallace, Esq. [C.].
f, *g*. Ad. sk.	Morty Is.	A. R. Wallace, Esq. [C.].
h. Juv. sk.	Kaioa Is.	A. R. Wallace, Esq. [C.].

2. Locustella fluviatilis.

Sylvia fluviatilis, *Wolf, Taschenb.* i. p. 229 (1810); *Temm. Man. d'Orn.* i. p. 183 (1820); *Naum. Vög. Deutschl.* iii. p. 694 (1823); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 141 (1840); *Werner, Atlas, Insectiv.* pl. 25 (1842).

Acrocephalus stagnatilis, *Naum. Nat. Land- u. Wass.-Vög. nördl. Deutschl., Nachtr.* p. 202, pl. 26. figs. 2, 3 (1811).

Calamoherpe fluviatilis (*Wolf*), *Boie, Isis*, 1822, p. 552.

Potamodus fluviatilis (*Wolf*), *Kaup, Natürl. Syst.* p. 123 (1829).

Locustella fluviatilis (*Wolf*), *Gould, B. Eur.* ii. pl. 102 (1837); *Bp. Comp. List B. Eur. & N. Amer.* p. 12 (1838); *Dresser, B. Eur.* pt. xxxiv. (1875).

Salicaria fluviatilis (*Wolf*), *Keys. u. Blas. Wirb. Eur.* p. 180 (1840); *Schl. Rev. Crit.* p. xxviii (1844).

Lusciniopsis fluviatilis (*Wolf*), *Bp. Ucc. Eur.* p. 36 (1842); *Newt. List B. Eur. Blasius*, p. 11 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 521 (1867); *Loche, Expl. Sci. Algér., Ois.* p. 266 (1867); *Salvad. Faun. Ital. Ucc.* p. 114 (1871).
Calamodyta fluviatilis (*Wolf*), *Gray, Gen. B.* i. p. 172 (1848); *Von Müller, Journ. Orn.* 1855, p. 198; *Gray, Hand-l. B.* i. p. 210. no. 2971 (1869).
Locustella strepitans, *Brehm, Vogelf.* p. 233 (1855).
Locustella wodzickii, *Brehm, Vogelf.* p. 234 (1855).
Lusciniopsis fluviatilis strepetans,
Lusciniopsis fluviatilis alticeps,
Lusciniopsis fluviatilis macrorhynchus,
Lusciniopsis fluviatilis macroura,
} *A. E. Brehm, Vers. Samml. C. L. Brehm*, p. 6 (1866).
Pseudoluscinia fluviatilis (*Wolf*), *Tristram, Ibis*, 1867, p. 77; *Shelley, B. Egypt*, p. 90 (1872).
Calamodyta (Lusciniopsis) fluviatilis (*Wolf*), *Fritsch, Vög. Eur.* p. 159 (1870).
Sylvia (Threnetria) fluviatilis (*Wolf*), *Schauer, Journ. Orn.* 1873, p. 161.
Threnetria gryllina, *Schauer, Journ. Orn.* 1873, p. 183.
Locustella cicada, *Hansmann, Journ. Orn.* 1873, p. 434.

General colour of the upper parts uniform dark olive-brown, very slightly more dusky on the wings, and very slightly paler on the margins of the innermost secondaries, and more so on the outside web of the second primary; a scarcely perceptible eye-stripe; lores and the feathers behind the eye uniform with the upper parts; generally obscure traces of transverse bars on the tail. The under-parts are greyish brown, shading somewhat abruptly into white on the throat, centre of belly, under wing-coverts, and the tips of the under tail-coverts; the feathers on the throat and fore neck have dark centres; axillaries and thighs pale brown; inner lining of quills pale grey. Bill typically Locustelline; upper mandible dark brown, under mandible pale horn-colour; rictal bristles scarcely perceptible. Wings very slightly concaved; second and third primaries nearly equal and longest; bastard primary very small, considerably shorter than the primary-coverts. Tail shorter than the wing, outside feathers 0·5 inch shorter than the longest, and shorter than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 2·96 to 2·7 inches, tail 2·5 to 2·3, culmen 0·6 to 0·54, tarsus 0·8.

It is not known that there is any difference in the colour of the plumage between the sexes, or that any change takes place during the autumn moult. *Birds of the year* are said to have the throat plain, without the dark centres; but I have been unable to obtain access to a skin in this plumage.

The River Grasshopper Warbler breeds in Russia as far north as Lake Ladoga, probably not extending its range westwards beyond the valley of the Danube. It is also supposed to breed in Asia Minor and Palestine, probably wintering in North Africa.

a. Ad. sk.	Europe.	Purchased.
b. Ad. st.	Europe.	Zoological Society.

There is no difference in the plumage of the sexes, nor is it known that there is any difference between spring and autumn plumage. In *birds of the year* the whole plumage is more or less suffused with yellow, causing the general colour of the upper parts to be a dark olive-brown, and the chin and centre of belly to be buffish yellow. In this plumage it is the *Arundinax blakistoni* of Swinhoe.

Middendorff's Grasshopper Warbler breeds in North-eastern Siberia and the Kurile Islands, passes through Japan on migration, and winters in the islands of the Malay archipelago.

a. Juv. sk.	Kurile Isles (*Wosnessensky*).	Prof. Brandt.
b. Ad. sk.	Lumbidan, Borneo.	Hugh Low, Esq. [C.].
c. Ad. sk.	Coast of N.E. Siberia (*H.M.S.* '*Herald*').	Capt. Kellett [P.].

5. Locustella certhiola.

Motacilla certhiola, *Pallas, Zoogr. Rosso-Asiat.* i. p. 509 (1811).
Sylvia certhiola (*Pall.*), *Temm. Man. d'Orn.* i. p. 186 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 83 (1822); *Temm. Man. d'Orn.* iii. p. 113 (1835); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 147 (1840); *Werner, Atlas, Insectiv.* pl. 27 (1842); *Schl. Rev. Crit.* p. 59 (1844).
Turdus certhiola (*Pall.*), *fide Temm. Man. d'Orn.* i. p. 187 (1820).
Calamoherpe certhiola (*Pall.*), *Boie, Isis*, 1822, p. 552.
Locustella certhiola (*Pall.*), *Gould, B. Eur.* ii. pl. 105 (1837); *Bp. Consp.* i. p. 280 (1850); *Swinhoe, P. Z. S.* 1871, p. 354; *David et Oust. Ois. Chine*, p. 248 (1877); *Dresser, B. Eur.* pt. lxviii. (1878).
Locustella rubescens, *Blyth, J. A. S. Beng.* xiv. p. 582 (1845); *Swinhoe, P. Z. S.* 1871, p. 354.
Calamodyta certhiola (*Pall.*), *Gray, Gen. B.* i. p. 172 (1848); *Gray, Hand-l. B.* i. p. 210. no. 2974 (1869); *Tacz. Journ. Orn.* 1872, p. 356; *Tacz. Bull. Soc. Zool. France*, 1876, p. 139.
Salicaria (Locustella) certhiola (*Pall.*), *Schrenck, Reis. u. Forsch. Amurl.* i. p. 372 (1860).
Sylvia (Calamoherpe) certhiola (*Pall.*), *Naum. Vög. Deutschl., Nachtr.* pt. 2, p. 91 (1860).
Parnopia certhiola (*Pall.*), *Newt. List B. Eur. Blasius*, p. 11 (1862).
Locustella temporalis, *Jerdon, B. Ind.* ii. p. 160 (1863).
Calamodyta doriæ, *Salvad. Atti R. Acc. Sc. Tor.* iii. p. 531 (1868); *Sharpe, Ibis*, 1870, p. 41, pl. ii. fig. 2.
Calamodyta rubescens (*Blyth*), *Gray, Hand-l. B.* i. p. 210. no. 2975 (1869); *Tacz. Journ. Orn.* 1872, p. 357.
Salicaria certhiola (*Pall.*), *Rey, Syn. eur. Vög.* p. 60 (1872).
Locustella minor, *David et Oust. Ois. Chine*, p. 250 (1877).

General colour of the upper parts russet-brown, greyer on the head, more tawny on the rump and upper tail-coverts, and much paler on the edges of the wing-coverts and innermost secondaries. In youngish adults each feather, except the quills, has a dark centre; in the tail-feathers the dark centre forms a large spot near the end, becoming narrower towards the rump, and is, in fact, a semiconfluent series of bars, becoming broader and less obscure towards the tip of the feather, where they are emphasized on all

but the two centre feathers by a nearly white apex. In older birds these dark subterminal spots on the rectrices become less conspicuous, and the dark centres to the feathers of the rump and upper tail-coverts disappear altogether. Inside web of the second primary paler; eye-stripe narrow and obscure; lores and the feathers behind the eye brown. The underparts are nearly white on the chin, throat, centre of belly, axillaries, and under wing-coverts, shading into buffish brown on the flanks and thighs, and into pale buffish brown on the breast and under tail-coverts, the latter having obscure white tips. Tail-feathers becoming darker towards the apex on the under surface, and finally tipped with greyish white. Bill typically Locustelline; upper mandible dark brown, under mandible pale horn-colour, darker towards the tip; rictal bristles obsolete. Wing with the third primary the longest, and the second intermediate in length between the fourth and fifth, in very rare cases between the third and fourth; bastard primary generally shorter than the primary-coverts, but in birds of the year sometimes extending 0·1 inch beyond them. Tail with the outside feather 0·65 inch shorter than the longest, and shorter than the under tail-coverts. Legs, feet, and claws pale brown. Length of wing 2·8 to 2·4 inches, tail 2·3 to 2·0, culmen 0·61 to 0·58, tarsus 0·9.

There is no difference in the plumage of the sexes. *After the autumn moult* the buffish brown of the underparts is deeper in tint, approaching chestnut-brown. *Birds of the year* have the underparts suffused with yellow, and many of the feathers of the throat have dark centres. The striation of the throat is seldom entirely lost after the first spring moult, and traces of striation are often met with on the flanks and the longest feathers of the under tail-coverts in apparently adult birds.

Pallas's Grasshopper Warbler breeds in Central and Eastern Siberia, passes through China on migration, and winters in India, Ceylon, the Burma peninsula, and the islands of the Malay archipelago. A straggler has been shot on Heligoland.

a, *b*. ♂ ad. sk.	Dauria, June 10, July 5.	Warsaw Museum [E.].
c. ♂ ad. sk.	Dauria, June 4 (*Dr. Dybowsky*).	R. B. Sharpe, Esq. [P.].
d. ♀ ad. sk.	Ceylon, Feb. 9.	Capt. Legge [P.].
e. ♂ ad. sk.	Sibu, Borneo, Nov. 21.	Alfred Everett, Esq. [C.].
f, *g*. Ad. sk.	Lumbidan, Borneo.	Gov. Ussher [C.].

6. Locustella locustella.

La Fauvette grise tachetée, *Briss. Orn.* vi. *Suppl.* p. 112 (1760).
The Grasshopper Lark, *Penn. Brit. Zool.* ii. p. 240 (1768).
La Fauvette tachetée, *Daubent. Pl. Enl.* 581. fig. 3 (1778).
La Locustelle, *Montb. Hist. Nat. Ois.* v. p. 328 (1778).
Motacilla nævia, *Bodd. Tabl. des Pl. Enl.* p. 35. no. 581 (1783).
Sylvia locustella, *Lath. Ind. Orn.* ii. p. 515 (1790); *Wolf, Taschenb.* i. p. 230 (1810); *Vieill. Faune Franç.* i. p. 226 (1820); *Temm. Man. d'Orn.* i. p. 184 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 82 (1822); *Naum. Vög. Deutschl.* iii. p. 701 (1823); *Roux,*

pale brown. Length of wing 4·4 inches, tail 3·05, culmen 0·95, tarsus 1·12.

Nothing is known of the changes in the colour of the plumage which may be caused by age, sex, or season.

The New-Guinea Ground-Thrush is supposed to be peculiar to that island, where it is probably a resident.

a. Ad. sk. S.E. New Guinea. A. Goldie, Esq. [C.].

10. Geocichla imbricata.

Zoothera imbricata, *Layard, Ann. Nat. Hist.* xiii. p. 212 (1854); *Jerdon, B. Ind.* i. p. 509 (1862).
Oreocincla nilghiriensis, *Blyth, apud Jerd. Ibis*, 1872, p. 139, *apud Holdsw. P. Z. S.* 1872, p. 446.
Oreocincla imbricata (*Layard*), *Hume, Stray Feath.* 1873, p. 437; *Legge, Birds of Ceylon*, p. 455, pl. xix. fig. 2 (1879).
Oreocincla gregoriana, *Nevil, Stray Feath.* i. p. 437 (1873).

In the *adult male in spring plumage* the general colour of the upper parts is dark olive-brown, each feather having a transverse terminal crescent-shaped black band; some feathers, especially on the head, have an obscure, pale ochraceous, transverse subterminal band; wing-coverts and innermost secondaries shading from dark olive-brown on the inside webs to ochraceous on the outside webs, but, with the exception of the primary-coverts, wanting the black terminal bands; lores pale grey; no trace of eye-stripe; quills brown, margined with ochraceous on the outside webs; four central and the two outside tail-feathers olive-brown, the remaining three on each side very dark olive-brown; outside tail-feathers tipped with white, and all more or less obscurely barred. Underparts ochraceous buff, each feather with a narrow, transverse, terminal crescent-shaped black band, nearly obsolete on the chin, centre of belly, and under tail-coverts; axillaries, basal half white, terminal half black; under wing-coverts, basal half black, terminal half white; basal half of the inner web of the secondaries and of many of the primaries nearly white. Bill dark brown, paler at the base of the under mandible. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary between the fifth and sixth, or sixth and seventh, bastard primary 1·28 to 1·15 inch. Legs, feet, and claws greyish brown. Length of wing 4·9 to 4·5 inches, tail 3·3 to 2·75, culmen 1·28 to 1·15, tarsus 1·15 to 1·1.

There appears to be no difference in the colour of the sexes. *Young in first plumage* and *birds of the year* are unknown.

The Ceylonese Ground-Thrush is confined to the island of Ceylon, breeding in the mountain-forests and descending into the jungle during the cold season.

. Ad. st. Ceylon. Purchased.

11. Geocichla mollissima.

Turdus mollissimus, *Blyth, J. A. S. Beng.* xi. p. 188 (1842); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgson*, p. 80 (1846); *Gray, Gen. B.*

p. 218 (1847); *Naum. Vög. Deutschl.* xiii. pl. 353 (1860); *Gray, Hand-l. B.* i. p. 254. no. 3090 (1869).

Turdus viscivorus ?, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 158 *a*. no. 197 (*afterwards altered to* 832), undè

Turdus oreocincloides, *Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Oreocincla rostrata, *Hodgs. Ann. Nat. Hist.* xv. p. 326 (1845).

Oreocincla mollissima, *Blyth*, J. A. S. Beng.* xvi. p. 141 (1847); *id. Cat. B. Mus. As. Soc.* p. 160 (1849); *Horsf. & Moore, Cat. B. Mus. E.I.Co.* i. p. 193 (1854); *Jerdon, B. India*, i. p. 533 (1862); *Godw.-Aust. J. A. S. Beng.* xxxix. p. 103 (1870); *Hume & Davison, Stray Feath.* vi. p. 256 (1878).

In the *adult male in spring plumage* the general colour of the upper parts is brownish olive; inside web and tip of primary-coverts black; lores buff; no trace of eye-stripe; quills brown, margined on the outside webs with ochraceous brown; four central tail-feathers olive-brown; three next on each side dark brown; outer tail-feathers dark brown at the base, gradually fading into pale brown, with an obscurely defined white wedge-shaped terminal mark; several other tail-feathers more or less distinctly tipped with white. Underparts, including the ear-coverts, white, with an ochraceous tinge on the breast and flanks, each feather with a transverse terminal crescent-shaped black band, nearly obsolete on the chin and centre of belly; under tail-coverts white, with obscure brown edges; axillaries white with black tips; under wing-coverts white with black bases; basal half of inner web of secondaries and of many primaries buff. Bill dark brown, paler at the base of the under mandible. Wing with the third and fourth primaries nearly equal and longest, second primary between the fifth and sixth, or sixth and seventh, bastard primary 1·0 to 0·9 inch. Legs, feet, and claws brownish yellow. Length of wing 5·6 to 5·1 inches, tail 4·1 to 3·7, culmen 1·1 to 0·92, tarsus 1·45 to 1·25.

Nothing appears to have been recorded of the difference between the sexes, or of any change which may take place in consequence of the *autumn moult*. *Birds of the year* appear to be unknown. *Young in first plumage* have pale shaft-lines and dark transverse terminal bars to the feathers of the back, and buff margins to the greater and median wing-coverts.

The short-tailed Oreocincloid Ground-Thrush breeds in the Himalayas from Nepal to Darjeeling, descending into the valleys during the cold season.

a. Ad. sk.	Kumaon (*Capt. Strachey*).	India Museum.
b, *c*, *d*, *e*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
f. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Turdus oreocincloides*, Hodgs.)
g. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Oreocincla rostrata*, Hodgs.)
h. Juv. st.	Nepal.	B. H. Hodgson, Esq. [P.].
i. Ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
k. Ad. sk.	Darjeeling.	H. Seebohm, Esq. [P.].
l. Ad. sk.	Darjeeling (*Pearson*).	India Museum.

* Typ. err. *moltissima*.

12. Geocichla dixoni.

This species differs from the preceding in having a longer tail, in having the general colour of the upper parts olive-brown rather than russet-brown, and in having the greater and median wing-coverts with conspicuous fan-shaped buff terminal spots. Bill dark brown above, paler at the base of the under mandible. Wing with the third and fourth primaries nearly equal and longest; second primary intermediate in length between the fifth and sixth, or sixth and seventh; bastard primary 1·0 to 0·9 inch. Legs, feet, and claws yellow. Length of wing 5·6 to 5·1 inches, tail 4·7 to 4·3, culmen 1·1 to 0·92, tarsus 1·4.

It is not known that the sexes differ in colour. *Birds of the year* and *young in first plumage* appear to be undescribed.

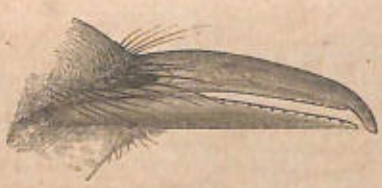
The Long-tailed Oreocincloid Thrush breeds throughout the Himalayas, descending to the plains in the cold season, where it has been found as far south as Central India and Tenasserim.

a, *b*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
c. Ad. sk.	Darjeeling (*Capt. Marshall*).	H. Seebohm, Esq. [P.].

13. Geocichla monticola.

Zoothera monticola, *Vigors*, *P. Z. S.* 1831, p. 172; *Gould*, *Cent. B. Himal. M.* pl. xxii. (1832); *Hartl. Syst. Verz.* p. 41 (1844); *Gray*, *Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 79 (1846); *Blyth*, *J. A. S. Beng.* xvi. p. 140 (1847); *Gray*, *Gen. B.* i. p. 218 (1847); *Blyth*, *Cat. B. Mus. As. Soc.* p. 160 (1849); *Bp. Consp.* i. p. 253 (1850); *Horsf. & Moore*, *Cat. B. Mus. E.I. Co.* i. p. 192 (1854); *Jerd. B. Ind.* i. p. 509 (1862); *Gray*, *Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 41 (1863); *Gray*, *Hand-l. B.* i. p. 261. no. 3811 (1869); *Godw.-Aust. J. A. S. Beng.* xli. pt. 2, p. 142 (1872); *Blanford*, *J. A. S. Beng.* xli. pt. 2, p. 49 (1872).

Turdus rostratus, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 144. nos. 268, 269, and pl. 146. no. 269 (*icon. ined.*).



Bill of *Geocichla monticola*.

In the *adult male in spring plumage* the general colour of the upper parts is dark brown, each feather obscurely barred with dark slate-grey; lores and ear-coverts brown, with pale shafts to the feathers; no trace of eye-stripe; wings and wing-coverts darkish brown, with obscure paler tips to the median and greater coverts;

tail brown, the outside feathers obscurely tipped with white; cheeks, sides of the neck, and breast brown, with obscure subterminal dark spots on each feather; chin and throat white, with dark brown fan-shaped terminal spots on some of the feathers; flanks brown, the feathers obscurely barred with dark brown; centre of belly and lowest flanks white, many of the feathers obscurely tipped with brown. Under tail-coverts dark brown, with white tips; axillaries, basal half white, terminal half dark brown, narrowly edged with white; lower under wing-coverts, basal portion dark brown, terminal portion white; basal half of inner web of the secondaries and of many of the primaries buffish white. Bill abnormally long, both mandibles obscurely serrated; the upper mandible curved considerably over the lower, dark brown, lower mandible slightly paler; rictal bristles long, numerous, but slender. Wing with the fourth primary slightly the longest, second primary between the sixth and seventh, bastard primary 1·7 to 1·5 inch. Legs, feet, and claws darkish brown. Length of wing 5·75 to 5·1 inches, tail 3·7 to 3·1, culmen 1·6 to 1·3, tarsus 1·4 to 1·25.

It is not known that any difference of plumage can be traced to sex or season. *Young in first plumage* have ochraceous shafts to the feathers of the head and back, ochraceous tips to the wing-coverts and innermost secondaries, the underparts generally suffused with ochraceous, and more profusely spotted and barred.

The Saw-billed Ground-Thrush breeds in the Himalayas, from Assam westwards almost to the confines of Cashmere. It is not known to be migratory.

a, *b*. Ad. sk.	Near Simla.	Capt. Stackhouse Pinwill [P.].
c. Ad. st.	Nepal (*Hodgson*).	India Museum. (Type of *Turdus rostratus*, Hodgs.)
d. Ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
e–k. Ad. & juv. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
l. Ad. sk.	Bootan (*Pemberton*).	India Museum.
m. Ad. sk.	Assam (*Griffith*).	India Museum.

14. Geocichla marginata.

Zoothera marginata, *Blyth, J. A. S. Beng.* xvi. p. 141 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 160 (1849); *Bp. Consp.* i. p. 253 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 192 (1854); *Gray, Hand-l. B.* i. p. 261, no. 3812 (1869); *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 268 (1870); *Hume, Nests and Eggs Ind. B.* p. 226 (1873); *Blyth & Wald. B. Burm.* p. 100 (1875); *Hume & Davison, Stray Feath.* vi. p. 246 (1878).

In the *adult male in spring plumage* the general colour of the upper parts is russet-brown, approaching chestnut-brown on the outer webs of the quills, wing-coverts, and innermost secondaries; lores and ear-coverts brown, with pale centres; no trace of eye-stripe; tail russet-brown; chin and upper throat nearly white, bounded on each side by a brown moustachial line; centre of belly white, the feathers gradually having broader and broader brown

margins, and smaller and smaller buffish-white centres, until, on the sides of the breast and flanks, they become brown, with buff shafts. Under tail-coverts brown, with white tips shading into chestnut at the edges; axillaries, basal half white, terminal half dark brown; lower under wing-coverts, basal half dark brown, terminal half buffish white; basal portion of inner web of the secondaries and many of the primaries rich buff; inner margin of quills scarcely paler than the rest of under surface. Bill abnormally long, dark brown above, scarcely paler below; rictal bristles numerous but slender. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·25 inch. Legs, feet, and claws darkish brown. Length of wing 4·85 to 4·7 inches, tail 3·0 to 2·9, culmen 1·34 to 1·3, tarsus 1·18 to 1·15.

It is not known that there is any difference in the colour between the *male* and *female*, or between *spring* and *autumn plumage*. *Birds of the year*, possibly more or less of the second year, have ochraceous tips to the greater and median wing-coverts. *Young in first plumage* have pale shaft-lines and dark transverse terminal bars to the feathers of the back and upper tail-coverts, and the wing-coverts are conspicuously tipped with buffish chestnut.

The Long-billed Ground-Thrush breeds in the Himalayas from Sikkim to Assam. It is also found in the north and central portions of the Tenasserim provinces, and has been recorded from Afghanistan. It is a hill bird, and is not known to be migratory.

a. Ad. sk.	Siam.	Purchased.
b, *c*. Juv. sk.	Upper India.	J. Gould, Esq. [C.].

15. Geocichla andromedæ.

Myiothera andromedæ, *Kuhl, fide Temm. Pl. Col.* ii. no. 392 (1820).
Myiophaga andromedæ (*Temm.*), *Less. Traité*, p. 395 (1831).
Zoothera andromedæ (*Temm.*), *Hartl. Syst. Verz.* p. 41 (1844); *Bp. Consp.* i. p. 253 (1850).
Zoothera andromedon, *Gray, Gen. B.* i. p. 218 (1847); *Gray, Hand-l. B.* i. p. 261. no. 3813 (1869).

In the *adult male in spring plumage* the general colour of the upper parts is dark brown, approaching black on the head and on the margins of the feathers of the back; the feathers of the lores and ear-coverts with pale centres; no trace of eye-stripe; wings and tail not quite so black as the back. Chin and upper throat white, with narrow transverse terminal black bands; cheeks pale slate-grey, with broad terminal black bands; lower throat and breast pale slate-grey; centre of belly and under tail-coverts buffish white; flanks black, with large diamond-shaped white centres; axillaries, basal half white, terminal half black; lower under wing-coverts, basal half black, terminal half white; basal portions of the inner webs of the secondaries and many of the primaries white. Bill abnormally long, dark brown above and below. Wing with the

fourth primary slightly the longest, second primary about equal to the sixth, bastard primary 1·25 to 1·1 inch. Legs, feet, and claws dark brown. Length of wing 4·9 to 4·8 inches, tail 3·05 to 2·8, culmen 1·15 to 1·12, tarsus 1·35 to 1·31.

It is not known that there is any difference of plumage attributable to either sex or season. *Young in first plumage* have pale ochraceous shafts to most of the feathers of the upper parts, and fan-shaped, ochraceous terminal spots to the wing-coverts. The underparts are also much suffused with ochraceous, and the breast and flanks barred with black, the diamond-shaped pale centres being irregular in shape.

Temminck's Ground-Thrush has been recorded from the islands of Java and Lombock, where it is supposed to be a resident.

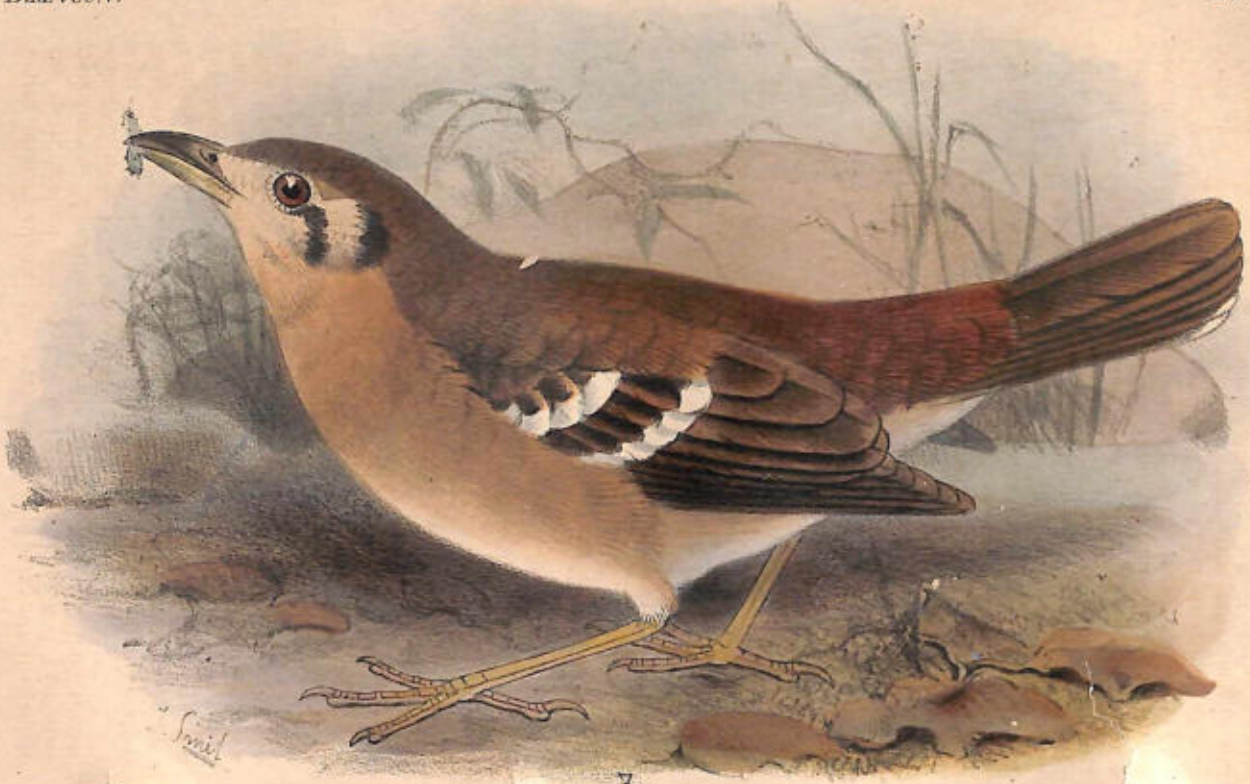
a. Ad. st.	Java.	Purchased.
b. ♂ ad. sk.	Java.	A. R. Wallace, Esq. [C.].
c. ♂ ad. sk.	Lombock.	A. R. Wallace, Esq. [C.].
d, *e*, *f*. Juv. sk.	Lombock.	A. R. Wallace, Esq. [C.].

16. Geocichla princei. (Plate XII.).

Chamætylas princei, *Sharpe*, *P. Z. S.* 1873, p. 625.

Bill of *Geocichla princei*.

General colour of the upper parts russet-brown, shading into olive-brown on the head and nape, and into chestnut-brown on the rump and upper tail-coverts; lores nearly white; the feathers of the cheeks and ear-coverts buffish white, tipped with black; no trace of eye-stripe; wings brown, innermost secondaries and outer webs of primaries russet-brown; wing-coverts with the outer webs russet-brown and the inner webs dark brown, the median and great coverts with conspicuous fan-shaped white terminal spots; tail russet-brown, the two outside feathers narrowly tipped with white. Chin, centre of belly, and under tail-coverts white, shading into pale chestnut-brown on the breast and flanks, a few feathers on the sides of the throat having black fan-shaped terminal spots; axillaries, basal half white, terminal half black; lower under wing-coverts, basal half black, terminal half white; basal portion of inner web of the secondaries and many of the primaries white. Bill abnormally short, the height at the nostrils more than a third of the length of the culmen, dark brown above and below, slightly paler at the base of the under mandible; rictal



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J. Smit del. *ecichla princei.* C. Mintern Bros. imp.

bristles small. Wing with the third primary longest, second primary between the fourth and fifth, bastard primary 1·0 inch. Legs, feet, and claws pale. Length of wing 4·1 inches, tail 3·0, culmen 0·86, tarsus 1·3.

Nothing is known of the changes of plumage which this species may undergo; but the type specimen may prove to be an example of *G. bivittata* with an abnormally short bill.

Sharpe's Ground-Thrush is only known from the interior of the Gold Coast of the Gulf of Guinea, in West Africa.

a. Ad. sk. Denkera, Gold Coast. R. B. Sharpe, Esq. [P.].
(Type of *Chamætylas princei*, Sharpe.)

17. Geocichla compsonota.

Geocichla compsonota, *Cassin, Proc. Ac. Nat. Sc. Phil.* p. 42 (1859).
Chamætylas compsonota (*Cassin*), *Heine, Journ. Orn.* 1859, p. 425.
Turdus compsonotus (*Cassin*), *Gray, Hand-l. B.* i. p. 260. no. 3799 (1869).

General colour of the upper parts bright rufous, shading into dark cinereous on the head; quills brownish black, the second and third primaries externally edged with dark cinereous, the remaining quills externally edged with bright rufous; wing-coverts and innermost secondaries bright rufous; tail brownish black, the outside feathers edged with rufous. Underparts white, shading into dark cinereous on the chin and cheeks, and suffused with dull yellowish brown on the breast and flanks. Bill bluish black and rather thick. Wings with the fourth and fifth primaries longest, bastard primary spurious. Legs pale yellowish. Length of wing 4·75 inches, tail 2·5, bill from gape 0·87, tarsus 0·1.

Nothing is known of the changes of plumage.

Cassin's Ground-Thrush is only known from the Gaboon a little south of the equator, in West Africa.

The British Museum does not possess an example of this species, and the type in the Philadelphia Museum collected by DuChaillu has been mislaid. No other example is known. It is probably nearly allied to *G. crossleyi*; but Cassin's description from which the above is taken is somewhat meagre.

18. Geocichla erythronota.

Geocichla erythronota, *Sclater, Ibis*, 1859, p. 113; *Walden, Tr. Z. S.* viii. p. 61, pl. vi. fig. 2 (1872); *Meyer, Ibis*, 1879, p. 125.
Turdus erythronotus (*Sclater*), *Gray, Hand-l. B.* i. p. 230. no. 3795 (1869).

In the *adult male in spring plumage* the general colour of the upper parts is chestnut, slightly darker on the head; lores white; eye-stripe black; ear-coverts white, broadly margined with black, connecting the black eye-stripe with the black throat; scapulars, wing-coverts, wings, and tail black, with large fan-shaped terminal white spots on the median and greater wing-coverts; the outside webs of many of the primaries are also margined more or less with white; outside tail-feathers broadly tipped with white,

and one or two of the others slightly so. Chin, throat, and sides of the neck black; the rest of the underparts white, the feathers on the breast and flanks having black semicircular terminal spots; axillaries, basal half white, terminal half dark brown; lower under wing-coverts, basal portion black, terminal portion white; basal portion of inside web of the secondaries and most of the primaries white. Bill dark at the base of the upper mandible, the remainder probably yellow. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the sixth and seventh, bastard primary 1·0 to 0·9 inch. Legs, feet, and claws pale. Length of wing 4·61 to 4·35 inches, tail 3·25 to 2·95, culmen 0·91 to 0·81, tarsus 1·35.

It is not known that there is any difference between the plumage of the *male* and that of the *female*, or between the *summer* and *winter* plumage. *Young in first plumage* have pale streaks on the shafts of the scapulars, a nearly white chin and throat, and have the rest of the underparts considerably suffused with ochraceous.

The Makassar Ground-Thrush has only been found on the island of Celebes, where it is supposed to be a resident.

a, *b*. Ad. sk.	Celebes.	A. R. Wallace, Esq. [C.].
c. Ad. sk.	Celebes.	Dr. A. B. Meyer [C.].
d. ♂ ad. sk.	Makassar.	A. R. Wallace, Esq. [C.].

(Type of *Geocichla erythronota*, Sclater.)

19. Geocichla interpres.

Turdus interpres, *Kuhl, fide Temm. Pl. Col.* ii. no. 458 (1828); *Less. Traité*, p. 410 (1831); *Gray, Gen. B.* i. p. 220 (1847); *Gray, Hand-l. B.* i. p. 200. no. 3794 (1869).

Geocichla interpres (*Temm.*), *Hartl. Syst. Verz.* p. 41 (1844); *Bp. Consp.* i. p. 268 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 191 (1854).

In the *adult male in spring plumage* the head is brownish chestnut, shading into orange-chestnut on the nape; the rest of the upper parts slate-grey; lores greyish white; no trace of eye-stripe; ear-coverts and cheeks black, the feathers of the former with white bases; innermost secondaries and quills dark brown; wing-coverts nearly black; median wing-coverts white; greater wing-coverts tipped with white; unemarginated portion of outside web of primaries pale slate-grey; tail brown, the outside feather on each side broadly tipped with white, and the next narrowly so. Chin, throat, and upper breast black; rest of the underparts white, suffused with ochraceous on the flanks; the feathers of the lower breast with conspicuous fan-shaped black terminal spots, which become obscure on the flanks; axillaries, basal portion white, terminal portion dark slate-grey; lower under wing-coverts, basal portion black, terminal portion white; basal portion of inner web of the secondaries and many of the primaries white. Bill dark brown above and below. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the seventh and eighth, bastard primary 0·95 to 0·85 inch. Legs, feet, and claws flesh-colour. Length of

wing 4·25 to 4·0 inches, tail 2·4 to 2·2, culmen 0·77 to 0·7, tarsus 1·16 to 1·1.

The adult plumage of the sexes appears to be alike, nor is it known that any important change takes place by abrasion. *Young in first plumage* appear to have the whole of the upper parts dull chestnut, each feather having a pale shaft and obscure pale centre; the white bars on the wings are suffused with chestnut, and the black on the underparts is confined to two moustachial lines on the cheeks, the rest being dull chestnut. This plumage is immediately moulted to the adult plumage in the first autumn, except that certain birds, which I take to be *females*, have the slate-grey of the upper parts replaced by dark olive-brown.

Kuhl's Ground-Thrush has been found in Java, Sumatra, and Lombock, and is not supposed to be migratory.

a. Ad. st.	[Java.]	Massena Coll.
b, *c*. Ad. sk.	Lombock.	A. R. Wallace, Esq. [C.].
d. ♂ imm. sk.	Lombock.	A. R. Wallace, Esq. [C.].
e, *f*, *g*. Juv. sk.	Lombock.	A. R. Wallace, Esq. [C.].
h. Skeleton.	Java.	Purchased.

20. Geocichla avensis.

Turdus avensis, *Gray, Griffith's ed. Cuvier*, vi. p. 530, pl. (1829); *Wald. Tr. Z. S.* viii. p. 61 (1872).
Geocichla avensis (*Gray*), *Hume, Str. F.* viii. p 39 (1879).

This species only differs from *G. interpres* in having the lores of a purer white and the greater wing-coverts without any white spot at the tips. Length of wing 4·25 inches, tail 2·5, culmen 0·82, tarsus 1·1.

Gray's Ground-Thrush has only been recorded from Burma and Malacca. It was originally described from a native drawing; and the only example known to exist is in the collection of Allan Hume, Esq.

21. Geocichla spiloptera.

Oreocincla spiloptera, *Blyth, J. A. S. Beng.* xvi. p. 142 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 160 (1849); *Kelaart, Prodr. Cat.* p. 122 (1852); *Layard, Ann. Nat. Hist.* 1853, p. 270; *Blyth, Ibis*, 1867, p. 303; *Holdsw. P. Z. S.* 1872, p. 446; *Legge, Ibis*, 1874, p. 18; *id. Str. F.* 1875, p. 367.
Turdus spilopterus (*Blyth*), *Gray, Hand-l. B.* i. p. 254. no. 3693 (1869); *Legge, Birds of Ceylon*, p. 451, pl. xix. (1879).

In the *adult male in spring plumage* the general colour of the upper parts is russet-brown, shading into olive-brown on the head; lores pale grey; no trace of eye-stripe; all the median and most of the greater wing-coverts dark brown with white tips; quills brown, the outside webs margined with russet-brown; tail-feathers russet-brown, the two outer ones on each side with obscure pale tips, and frequently all obscurely barred with scarcely perceptible transverse bands. Underparts white, shading into brown on the flanks and sides of breast; ear-coverts and the feathers on the cheeks, breast,

and a few on the flanks with nearly black fan-shaped terminal spots; axillaries, basal half white, terminal half brown; under wing-coverts, basal portion dark brown, terminal portion white. Bill dark brown, paler at the base of the under mandible. Wing with the fourth and fifth primaries nearly equal and longest, second primary about equal to the eighth, bastard primary 0·9 to 0·85 inch. Legs, feet, and claws greyish brown. Length of wing 4·0 to 3·6 inches, tail 3·4 to 3·0, culmen 0·91 to 0·85, tarsus 1·4 to 1·3.

The *female* is said to be less olivaceous on the upper parts than the male. Immediately *after the autumn moult* the prevailing colour of the upper parts of both sexes is russet-brown. *Birds of the year* probably differ little from adults. *Young in the first plumage* have ochraceous shaft-lines to the feathers of the upper parts; the spots at the tips of the wing-coverts and the ground-colour of the underparts are ochraceous.

The Spotted Ground-Thrush appears to be confined to the central hill country of Ceylon, where it is a resident, ascending the mountains to an elevation of 4000 feet, and extending its range on the west and south sides of the island almost to the sea.

a, b, c. Ad. sk.	Ceylon.	Purchased.
d, e, f. Ad. sk.	Nuwera Ellia, Ceylon.	Mr. E. Boate [C.].

22. Geocichla guttata.

Turdus guttatus, *Vigors, P. Z. S.* 1831, p. 92; *Smith, Ill. Zool. S. Afr., Birds*, pl. xxxix. (1839); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 269 (1850); *Layard, B. S. Afr.* p. 128 (1867); *Gray, Hand-l. B.* i. p. 253. no. 3670 (1869); *Sharpe, Cat. Afr. B.* p. 21 (1871); *Gurney, Ibis*, 1873, p. 255; *Sharpe, ed. Layard's B. S. Afr.* p. 200 (1876).

Psophocichla guttata (*Vigors*), *Cab. Journ. Orn.* 1860, p. 182.

General colour of the upper parts fulvous brown, somewhat darker on the head and inclining to olive-brown on the upper tail-coverts; lores nearly white; no trace of eye-stripe; ear-coverts brownish white, tipped with black; quills brown, the unemarginated portion of the outside webs ochraceous brown; lesser wing-coverts fulvous brown, with small terminal fan-shaped ochraceous spots; median wing-coverts dark brown, with large terminal fan-shaped white spots; greater wing-coverts similar, but the white spots principally confined to the outside webs; primary-coverts dark brown, with long subterminal ochraceous spots on the outside webs; innermost secondaries fulvous brown, with obscure ochraceous fan-shaped terminal spots; six central tail-feathers uniform fulvous brown, three outer ones on each side darker on the inside webs; outer tail-feathers very conspicuously tipped with white, especially on the inside webs, the next two on each side less conspicuously tipped. Underparts white, with a slight shade of ochraceous on the breast, the feathers with terminal fan-shaped black spots, which are nearly obsolete on the centre of the throat and belly, and quite so on the lower flanks, thighs, and under tail-coverts; axillaries, basal half white, terminal

half dark olive-brown; under wing-coverts, basal half dark olive-brown, terminal half white; basal half of inner webs of the secondaries and many of the primaries white. Bill dark brown above, pale horn-colour underneath. Wing with the third and fourth primaries nearly equal and longest, second primary between the sixth and seventh, bastard primary 0·9 to 0·8 inch. Legs, feet, and claws pale. Length of wing 4·65 to 4·5 inches, tail 3·7 to 3·42, culmen 1·0 to 0·95, tarsus 1·3 to 1·22.

Nothing is known of the changes of plumage of this species.

The Natal Ground-Thrush has only been obtained from the forests of Natal, where it is supposed to be a resident.

a. Ad. sk.	Port Natal.	Purchased.
b, *c*, *d*. Ad. sk.	Port Natal.	R. B. Sharpe, Esq.

23. Geocichla peronii.

Turdus peronii, *Vieill. N. Dict. d'Hist. Nat.* xx. p. 276 (1818); *Gray, Hand-l. B.* i. p. 260. no. 3793 (1869).
Turdus novæ-hollandiæ, *Less. Traité*, p. 411 (1831, *nec Lath.*).
Geocichla rubiginosa, *Sal. Müll. Verh. Nederl. Overz. Bez.* p. 172 (*circ.* 1840); *Bp. Consp.* i. p. 268 (1850).
Turdus rubiginosus (*Müll.*), *Gray, Gen. B.* i. p. 220 (1847).

General colour of the upper parts chestnut, slightly darker on the head; lores white; no trace of eye-stripe; ear-coverts mottled white and chestnut, surrounded with black; cheeks mottled black, white, and chestnut; wings brown; lesser wing-coverts chestnut; greater and median wing-coverts dark brown, edged with chestnut-brown and broadly tipped with white; innermost secondaries chestnut-brown; many of the primaries with more or less white on the outside webs; tail-feathers brown on the inside webs and chestnut-brown on the outside webs, outer feather on each side broadly tipped with white. Chin, throat, centre of belly, thighs, and under tail-coverts white; sides of neck, breast, and flanks chestnut; axillaries white at base, nearly black at tip; lower under wing-coverts black at base, white at tip; basal half of inside web of the secondaries and most of the primaries white. Bill dark brown above and below, but paler at the base of the lower mandible. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the sixth and seventh, bastard primary [illegible]0 to 0·85 inch. Legs, feet, and claws pale. Length of wing 4·25 to [illegible] inches, tail 3·25 to 3·1, culmen 1·0 to 0·85, tarsus 1·4 to 1·3. There does not appear to be any difference in the plumage of the sexes, nor is it known that summer differs from winter plumage. The *first plumage of the young* is unknown.

The Timor Ground-Thrush appears to be confined to the island of Timor, where it is supposed to be a resident.

a. Ad. st.	Timor.	Zoological Society.
b–*e*. Ad. sk.	Timor.	A. R. Wallace, Esq. [C.].

24. Geocichla bivittata.

Turdus bivittatus, *Reichenow, Journ. Orn.* 1874, p. 104; *id. Journ Orn.* 1875, p. 47.

General colour of the upper parts russet-brown, very russet o the upper tail-coverts, but inclining to olive-brown on the upp back; lores dark brown; no trace of eye-stripe; ear-coverts brown median and greater wing-coverts dark brown, with large terminal fan-shaped white spots; primary-coverts dark brown; tail russet-brown, the outside feathers with white tips. Chin, upper throat, belly, and under tail-coverts nearly white, shading into pale russet-brown on the lower throat, breast, and flanks; axillaries, basal half white, terminal half brown; under wing-coverts, basal half brown, terminal half white; basal portion of the inner web of secondaries white. Bill dark brown, paler at the base of the under mandible. Wings with the fourth primary slightly the longest, second primary about equal to the seventh, bastard primary 0·95 inch. Legs, feet, and claws flesh-colour. Length of wing 4·51 inches, tail 3·02, culmen 0·9, tarsus 1·37.

Nothing is known of the changes of plumage of this species.

Reichenow's Ground-Thrush has only been obtained on the mountains of the Gold Coast, where it is supposed to be resident.

The British Museum does not possess an adult skin of this species. The description is taken from the type in the Berlin Museum.

a, b. Juv. sk. Denkera (*Aubinn*). R. B. Sharpe, Esq. [P.].

25. Geocichla gurneyi.

Turdus gurneyi, *Hartlaub, Ibis*, 1864, p. 350, pl. ix.; *Layard, B. S. Afr.* p. 129 (1867); *Gurney, Ibis*, 1868, p. 156; *Gray, Hand-l. B.* i. p. 253. no. 3672 (1869); *Heugl. Orn. N.O.-Afr.* p. 384 (1869); *Ayres, Ibis*, 1876, p. 426; *Sharpe, ed. Layard's B. S. Afr.* p. 202 (1876); *Salvin & Sclater, Ibis*, 1877, p. 324.

General colour of the upper parts olive-brown, slightly darker on the head and shading into fulvous brown on the rump and upper tail-coverts, the innermost secondaries, and the unemarginated portion of the outside webs of the quills; lores dark brown, above the lores chestnut-brown; no trace of eye-stripe; ear-coverts dark olive-brown; quills brown; lesser wing-coverts fulvous brown; median wing-coverts dark brown, almost black, with large terminal fan-shaped white spots; greater wing-coverts similar, but the white sp principally confined to the outside web; primary-coverts dark bro tail fulvous brown, the outside feathers obscurely tipped with w Chin, throat, breast, and flanks chestnut, shading rather sudden into white on the belly, thighs, and under tail-coverts, the longe of the latter obscurely margined with brown; axillaries, basal half white, terminal half dark olive-brown; under wing-coverts, basal half dark olive-brown, terminal half white; basal portion of inner web of secondaries white. Bill dark brown above and below. Wing with the fourth and fifth primaries nearly equal and longest, second

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Geocichla piaggiæ

primary between the eighth and ninth, bastard primary 1·2 inch. Legs, feet, and claws "flesh-colour." Length of wing 4·2 inches, tail 3·4, culmen 0·9, tarsus 1·32.

Nothing is known of the changes of plumage of this species.

Gurney's Ground-Thrush has only been obtained in the forests of Natal and the Transvaal, where it is supposed to be a resident.

a. ♂ ad. sk. Macamac, Transvaal. J. H. Gurney, Esq. [P.].

26. Geocichla piaggii. (Plate XI.)

? Turdus fauve ou roux, *Lefeb. Abyss. Ois.* p. 168*.
? Turdus gurneyi, *Hartl. apud Heugl. Orn. N.O.-Afr.* i. p. 384 (1869, *partim*).
Turdus piaggii, *Bouvier, Bull. Soc. Zool. France*, 1877, p. 456.

This species only differs from *G. gurneyi* (Hartl.) in having the forehead chestnut, shading into chestnut-brown on the head and ear-coverts. Bill dark brown above and below. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the seventh and eighth, bastard primary 1·0 inch. Legs, feet, and claws pale. Length of wing 4·15 to 4·0 inches, tail 3·65 to 3·3, culmen 0·86 to 0·8, tarsus 1·3.

Nothing is known of the changes of plumage.

The Central-African Ground-Thrush is only known from the Uganda country, near the supposed source of the Nile.

a. Ad. sk. Lake Sanne. A. Bouvier, Esq. [C.]. (Type of *Turdus piaggii*, Bouvier.)

27. Geocichla crossleyi.

Turdus crossleyi, *Sharpe, P. Z. S.* 1871, p. 607, pl. xlvii.; *Reichenow, Journ. Orn.* 1875, p. 50.

General colour of the upper parts russet-brown, darker and more rufous on the head, and also more rufous on the rump and upper tail-coverts, and shading into bright rufous-chestnut on the nape; lores dark brown, above the lores chestnut-red; no trace of eye-stripe; innermost secondaries rufous-brown, especially on the outside web, and still more rufous at the tips; white spots on the wing-coverts exactly as in *G. gurneyi*; tail dark rufous-brown, the outside feathers obscurely tipped with white. The whole of the underparts, including the axillaries and under surface of wing, exactly as in *G. gurneyi*. Bill dark brown above and below. Wing with the fourth and fifth primaries nearly equal and longest, second primary a trifle shorter than the seventh, bastard primary 0·9 inch. Legs, feet, and claws pale. Length of wing 4·0 inches, tail 2·95, culmen 0·91, tarsus 1·3.

Nothing is known of the *female* or *young*.

Crossley's Ground-Thrush is only known from the Cameroon Mountains, West Africa.

a. Ad. sk. Cameroons, Feb. 24, 1871 (*Crossley*). R. B. Sharpe, Esq. (Type of *Turdus crossleyi*, Sharpe.)

28. Geocichla cyanonotus.

Turdus cyanotus, *Jard. & Selby, Ill. Orn.* i. pl. xlvi. (1828); *Sykes, P. Z. S.* 1832, p. 87; *Jerd. Madr. Journ.* x. p. 254 (1839); *Gray, Hand-l. B.* i. p. 259. no. 3792 (1869).

Geocichla cyanota (*Jard. & Selby*), *Blyth, J. A. S. Beng.* xvi. p. 145 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 163 (1849); *Bp. Consp.* i. p. 268 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 191 (1854); *Jerd. B. Ind.* i. p. 517 (1862); *Hume, Nests and Eggs Ind. B.* p. 229 (1873); *Ball, Stray Feath.* 1874, p. 407; *Hume, Stray Feath.* 1876, p. 398.

In the *adult male in spring plumage* the head and nape are green ochraceous; the general colour of the rest of the upper parts pale slate-grey, each feather darker in the centre; no trace of an eye-stripe; cheeks white; a dark-brown band extends from the eye halfway to the shoulder; behind this is a white band extending nearly to the shoulder; behind this another shorter dark-brown band, leaving a small white spot at the junction of the ear-coverts and the nape; wings and tail the same as in *G. citrina*. Underparts as in *G. citrina*, except that the chin and throat are white. Bill dark brown above and below. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the sixth and seventh, bastard primary 1·0 to 0·85 inch. Legs, feet, and claws flesh-colour. Length of wing 4·3 to 4·6 inches, tail 3·1 to 2·8, culmen 0·9 to 0·85, tarsus 1·2 to 1·15.

The *female* appears to differ from the male in having the upper back, scapulars, outer webs of secondaries, greater and lesser wing-coverts, and innermost secondaries suffused with olive-green. In most cases the greater wing-coverts are tipped with orange-chestnut, leading to the supposition that they are *birds of the year*. No change worthy of note is produced by the *autumn moult*. *Young in first plumage* appear to be unknown.

The White-throated Ground-Thrush appears to be confined to the jungles of Central and Southern India, probably breeding in the former and retiring to the latter during the cool season.

a, *b*. ♂ ad. st.	India.	Purchased.
c. ♂ ad. sk.	Behar, India.	B. H. Hodgson, Esq. [C.].
d. ♀ ad. sk.	Malabar.	Purchased.
e. ♀ ad. sk.	Matheran, Jan. 23, 1872.	Major Hayes Lloyd [P.].
f. ♀ ad. sk.	Matheran, Feb. 3, 1872.	Major Hayes Lloyd [P.].
g. ♂ ad. sk.	Travancore (3500 feet), Sept. 6, 1878.	F. W. Bourdillon [C.].
h. Sternum.	India.	B. H. Hodgson, Esq. [P.].

29. Geocichla citrina.

Orange-headed Thrush, *Lath. Gen. Syn. Suppl.* i. p. 145 (1787).

Turdus citrinus, *Lath. Ind. Orn.* i. p. 350 (1790); *Temm. Pl. Col.* no. 445 (1828); *Gray, Gen. B.* i. p. 220 (1847); *Gray, Hand-l. B.* i. p. 259. no. 3790 (1869).

Turdus macei, *Vieill. N. Dict. d'Hist. Nat.* xx. p. 270 (1818).

Turdus lividus, *Tickell, J. A. S. Beng.* ii. p. 577 (1833).

Petrocincla cyanota (*Jard.*), *apud Hodgs. MS. Drawings* (*in the Brit. Mus.*) *of Birds of Nepal, Passeres*, pls. 138, 139. no. 584, *unde Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Petrocossyphus citrinus (*Lath.*), *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 79 (1846).

Geocichla citrina (*Lath.*), *Blyth, J. A. S. Beng.* xvi. p. 145 (1847); *id. Cat. B. Mus. As. Soc.* p. 163 (1849); *Bp. Consp.* i. p. 268 (1850); *Cab. Mus. Hein.* i. p. 6 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 189 (1854); *Jerd. B. Ind.* i. p. 517 (1862); *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 268 (1870); *Hume, Nest and Eggs Ind. B.* p. 229 (1873); *Blyth & Wald. B. Burm.* p. 99 (1875); *Hume & Davison, Stray Feath.* vi. p. 250 (1878); *Legge, Birds of Ceylon*, p. 457 (1879); *Scully, Stray Feath.* viii. p. 283 (1879).

Geocichla layardi, *Wald. Ann. Nat. Hist.* 1870. v. p. 416; *Holdsw. P. Z. S.* 1872, p. 445; *id. P. Z. S.* 1877, p. 160.

In the *adult male in spring plumage* the head and nape are orange-chestnut; general colour of the rest of the upper parts pale slate-grey, each feather darker in the centre; lores and ear-coverts chestnut; no trace of eye-stripe; quills and innermost secondaries brown, with the unemarginated portions of the outside webs slate-grey; lesser wing-coverts slate-grey; median wing-coverts broadly tipped with white; greater wing-coverts and primary-coverts dark brown on inside web and slate-grey on outside web, generally with traces of white on the outside webs at the tip: two centre tail-feathers and most of the outside webs of the remainder dark slate-grey, the rest dark brown; the outside tail-feathers are generally paler towards the tip, and frequently many of them have white tips. The underparts are orange-chestnut, occasionally approaching dark orange-chestnut, shading into white on the under tail-coverts; axillaries, basal portion white, terminal portion dark slate-grey; lower under wing-coverts, basal portion dark slate-grey, terminal portion white; basal portion of the secondaries and some of the primaries white on the inside webs. Bill dark brown, paler at the base of the under mandible; rictal bristles very short. Wing with the third and fourth primaries nearly equal and longest; second primary generally between the fifth and sixth, sometimes between the sixth and seventh; bastard primary 1·1 to 0·9 inch. Legs, feet, and claws flesh-colour. Length of wing 4·8 to 4·4 inches, tail 3·15 to 2·85, culmen 0·95 to 0·8, tarsus 1·35 to 1·2.

The *female* is supposed to resemble the male, except in having the upper back and scapulars suffused with olive-green and in having dark tips to the ear-coverts; but as I find only three skins in this state of plumage in a series of thirty-two, I suspect it to be that of the female in first year's plumage only. A bird in the collection *in first plumage* has pale shaft-streaks on the feathers of the head and back, and the underparts are dull and obscurely streaked. This bird is moulting on the middle of the back into the slate-grey of the adult. No important change in the colour of the plumage of the adult is produced by the *autumn moult*.

Birds from Ceylon have been described as a distinct species. I cannot learn that more than two examples have been obtained on this island, where it is probably only an occasional winter visitant.

These skins agree in size and wing-formula with typical examples, but are somewhat darker in colour, though not quite so dark as *G. rubecula*. I do not think, however, that the Ceylon birds have the slightest claim even to subspecific rank, as I have seen skins quite as dark or darker from Nepal and Burma.

The Orange-headed Ground-Thrush breeds in the Himalayas from Nepal to Assam, apparently not ascending the mountains above 5000 feet. In the cold season it migrates to various parts of Northern and Central India and Burma, occasionally straying as far south as Ceylon.

a. ♀ ad. st.	India.	Purchased.
b, *c*. ♂ ad. sk.	Bootan (*Major Pemberton*).	India Museum.
d. ♂ ad. sk.	Darjeeling.	C. Bygrave Wharton, Esq. [P.].
e, *f*. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
g. Juv. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
h, *i*, *k*, *l*. ♂ ♀ ad. sk.	Nepal (*B. H. Hodgson, Esq.*).	India Museum.
m. ♂ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
n. ♂ ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
o. ♀ ad. sk.	Madras.	India Museum.
p. Sternum.	India.	B. H. Hodgson, Esq. [P.].

30. Geocichla rubecula.

Geocichla rubecula, *Gould*, *P. Z. S.* 1836, p. 7; *Cab. Mus. Hein.* i. p. 6 (1850).

Turdus rubecula (*Gould*), *Gray*, *Gen. B.* i. p. 220 (1847); *Gray*, *Hand-l. B.* i. p. 259. no. 3791 (1869).

This species is little more than a local race of *G. citrina*, Lath., and it will probably be found that intermediate forms occur, in which case it must be degraded to the rank of a subspecies. It is a smaller bird with a more rounded wing, and darker in colour than the commoner species; the general colour of the upper parts is a darker and duller slate-grey; on the other hand, the head, neck, and underparts are a darker but quite as rich orange-chestnut. Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary intermediate in length between the sixth and seventh, or seventh and eighth; bastard primary 1·05 to 0·8 inch. Length of wing 4·4 to 4·0 inches, tail 3·0 to 2·8, culmen 0·89 to 0·82, tarsus 1·3 to 1·24.

Nothing appears to be known of the differences of plumage of this species.

Gould's Ground-Thrush appears to be confined to the island of Java, where it is supposed to be a resident.

a. Ad. st.	Java.	Purchased.
b. Ad. sk.	Java.	A. R. Wallace, Esq. [C.].
c. Ad. sk.	Java.	F. Godman and O. Salvin, Esqrs. [P.].
d. Ad. sk.	Java. [Erroneously labelled "Assam, *McClelland*."]	India Museum.
e. Skeleton.	Java.	Purchased.

31. Geocichla andamanensis.

Geocichla albogularis, *Blyth, apud Walden, Ibis*, 1874, p. 138; *apud Hume, Str. F.* 1874, p. 221 (*partim*); *apud Hume, Str. F.* 1876, p. 289 (*partim*).

Geocichla andamanensis, *Walden, Ann. Nat. Hist.* 1874, p. 156; *Hume, Str. F.* 1874, p. 495.

This is a smaller bird than *G. citrina*, but resembles it precisely in colour, with the following exceptions:—The slate-grey of the upper parts is slightly darker, but not so dark as in *G. rubecula*; the crown, extending more or less onto the nape, is brownish chestnut, instead of orange-chestnut; the lores and chin are greyish white, instead of being nearly concolorous with the head and throat; there are only traces of pale tips to the tail-feathers, and the wings are without any white bar, the median wing-coverts being, like the rest, uniform slate-grey on the outer webs, and dark brown on the inside webs; the underparts vary from orange-chestnut to dark orange-chestnut as in *G. citrina*. Bill, legs, &c. as in *G. citrina*. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·05 to 0·85 inch. Length of wing 4·2 to 3·8 inches, tail 3·1 to 2·6, culmen 0·85 to 0·8, tarsus 1·25 to 1·2.

The *female* differs from the male in having the upper back, scapulars, and the portions of the secondaries and wing-coverts which are slate-grey in the male suffused with olive-green. No change of importance is produced by the *autumn moult*. The ear-coverts of the female, and what I presume to be males in the first or second year, are obscurely tipped with brown; but this disappears in what I presume to be old males. *Young in first plumage* unknown.

The Andaman Ground-Thrush is principally confined to the Andaman Islands, where it appears to be a resident. It has also been recorded from Java.

a. ♂ ad. sk. S. Andamans, Mar. 3, 1874 (*Capt. Wimberley*). R. B. Sharpe, Esq. [P.].

32. Geocichla albogularis.

Geocichla albogularis, *Blyth, J. A. S. B.* xvi. p. 146 (1847); *Hume, Str. F.* 1874, p. 221 (*partim*); *id. Str. F.* 1876, p. 289 (*partim*).

Geocichla innotata, *Blyth*, ♀, *apud Blyth, Cat. B. Mus. As. Soc.* p. 163 (1849); *apud Bp. Consp.* i. p. 268 (1850).

This species has the size and wing-formula of *G. andamanensis*, but has the forehead, crown, and nape a rich dark orange-chestnut, as rich as, but slightly darker than, those of *G. rubecula*; the lores, chin, and upper throat are nearly white, and the rest of the underparts intermediate between typical examples of *G. citrina* and *G. rubecula*. The slate-grey of the upper parts, and the rest of the plumage, including the bill, legs, &c., with the exception of the parts above mentioned, is the same as in *G. andamanensis*. Length of wing 4·2 to 3·9 inches, tail 2·9 to 2·6, culmen 0·85 to 0·79, tarsus 1·26 to 1·2, bastard primary 1·1 to 0·9.

The *female* differs from the male in having the upper back &c. suffused with olive-green as in the allied species. It is not known that there is any seasonal change of colour worthy of note. *Young in first plumage* have pale, dull chestnut shaft-lines to the feathers of the head and back, chestnut tips to the wing-coverts, and pale centres and obscure dark margins to the feathers of the breast. The ear-coverts have also dark tips.

The Nicobar Ground-Thrush is confined to the Nicobar Islands, where it appears to be a resident.

a. ♀ ad. sk. Nicobars, Dec. 1878 (*Capt. Wimberley*). Capt. Wardlaw Ramsay [P.].

33. Geocichla innotata.

Geocichla innotata*, *Blyth, J. A. S. Beng.* xv. p. 370 (1846); *id. J. A. S. Beng.* xvi. p. 146 (1847); *Ball, Str. F.* 1873, p. 69; *Hume, Str. F.* 1874, p. 221; *Hume & Davison, Stray Feath.* vi. p. 250 (1878).

Turdus innotatus (*Blyth*), *Gray, Hand-l. B.* i. p. 260. no. 3798 (1869).

In size and wing-formula this species resembles *G. citrina* (Lath.). In colour it only differs from that species in having the head and nape rich dark orange-chestnut as in *G. albogularis*, and in having the wing without any white bar, as in the last-mentioned species and *G. andamanensis*. From the two latter species, besides differing from the former in the colour of the throat and from the latter in the colour of the head, it is distinguished by its larger size and less rounded wing. Bill, legs, &c. as in *G. citrina*. Wings with the fourth primary slightly the longest, second primary equal to or longer than the sixth, bastard primary 1·05 to 1·0 inch. Length of wing 4·8 to 4·55 inches, tail 3·0 to 2·8, culmen 0·8, tarsus 1·3 to 1·25.

The *female* differs from the male in having the upper back &c. suffused with olive-green as in the allied species. It is not known that any change of colour is produced by the autumn moult. *Young in first plumage* appear to be unknown.

The Malay Ground-Thrush appears to be confined to the Burma peninsula. It has been recorded from South Burma and Malacca. It is not known that it is migratory.

The British Museum does not possess an example of this species. The descriptions have been taken from skins in the Tweeddale collection, in the possession of Capt. Wardlaw Ramsay, and in my own.

34. Geocichla nævia.

Spotted Thrush, *Lath. Gen. Syn.* ii. p. 27 (1783).

Turdus nævius, *Gmel. Syst. Nat.* i. p. 817 (1788); *Lath. Ind. Orn.* i. p. 331 (1790); *Vieill. Ois. Amér. sept.* iii. pl. lxvi. (1807); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 289 (1818); *Audub. Orn. Biogr.*

* Misspelt *innotata*.

iv. p. 489, pls. ccclxix., cccexxxiii. (1838); *Bp. Comp. List B. Eur. & N. Amer.* p. 17 (1838); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 271 (1850); *Sclater, P. Z. S.* 1859, p. 331; *Dall & Bann. Tr. Chic. Acad.* i. p. 276 (1869); *Gray, Hand-l. B.* i. p. 258. no. 3758 (1869); *Coues, Key N. Amer. B.* p. 72 (1872); *Baird, Brewer, & Ridgw. Hist. N. Amer. B.* i. p. 29 (1874).

Orpheus meruloides, *Swains. Faun. Bor.-Amer. Birds*, ii. p. 187, pl. xxxviii. (1831).

In the *adult male in spring plumage* the general colour of the upper parts is dark slate-grey, slightly darker on the head; lores, the feathers behind the eye, and the ear-coverts nearly black; the eye-stripe commences over the eye and extends to the nape, is very conspicuous, clearly defined, and bright chestnut; quills brown, the unemarginated portion of the outer webs pale chestnut towards the base and apex; lesser wing-coverts dark slate-grey; median wing-coverts dark brown with large chestnut fan-shaped terminal spots; greater wing-coverts dark slate-grey, with large chestnut fan-shaped terminal spots on the outside webs; innermost secondaries dark brown with small dull-chestnut terminal fan-shaped spots, the basal half of the outer web of most of them fringed with dull chestnut; tail brown, the outside webs margined with slate-grey, the outside feathers conspicuously tipped with white, the others less conspicuously so. Chin and throat chestnut, breast dark brown, nearly black; rest of underparts chestnut, fading into nearly white on the centre of the belly and the centre and tips of the under tail-coverts; upper flanks pale chestnut, barred with pale slate-grey; lower flanks slate-grey; under tail-coverts margined with pale chestnut; axillaries, basal portion white, terminal portion dark brown; lower under wing-coverts, basal portion dark brown, terminal white with an occasional dash of pale chestnut. Bill dark brown above and below; rictal bristles unusually well developed. Wing with the third and fourth primaries nearly equal and longest, second primary between the fifth and sixth, bastard primary 1·0 to 0·8 inch. Legs, feet, and claws pale. Length of wing 5·0 to 4·8 inches, tail 3·65 to 3·3, culmen 1·0 to 0·9, tarsus 1·3 to 1·25.

The *female* differs from the male in being olive-brown above where the male is dark slate-grey; the chestnut of the underparts is paler, and the dark-brown pectoral band is nearly obsolete. No important change takes place in consequence of the *autumn moult*. *Birds of the year* have the plumage of the female in both sexes. *Young in first plumage* are unknown.

The Alaska Ground-Thrush breeds in Alaska as far north as Behring's Straits, and winters in the Oregon Territory and California, stragglers occasionally wandering as far as the Eastern States.

a. Ad. st.	California (*David Day*).	Zoological Society.
b. ♂ ad. sk.	Sumass Prairie, British Columbia.	J. K. Lord, Esq. [C.].
c, *d*, *e*. ♂ ad. sk.	West side Rocky Mountains.	J. K. Lord, Esq. [C.].
f. ♀ ad. sk.	California, Jan. 23, 1872.	R. B. Sharpe, Esq. [P.].
g. ♀ ad. sk.	California.	Hugh Cuming, Esq. [C.].

35. Geocichla wardi.

Turdus wardii, *Jerd. J. A. S. Beng.* xi. p. 882 (1842); *Gray, Gen. B.* i. p. 219 (1847); *Jerd. Ill. Ind. Orn.* pl. viii. (1847); *Gray, Hand-l. B.* i. p. 256. no. 3716 (1869); *Legge, Birds of Ceylon*, p. 453 (1879).

Turdus picaoides, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 145 a. no. 363, and pl. 150. no. 363 (*male*), *undè Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Oreocincla micropus, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 158 a. no. 858 (*female*), *undè Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Zoothera melanoleuca, *Hartl. Syst. Verz.* p. 42 (1844); *id. Rev. Zool.* 1845, p. 407.

Merula wardii (*Jerd.*), *Blyth, J. A. S. Beng.* xvi. p. 146 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 163 (1849); *Kelaart, Prodr. Cat.* p. 122 (1852); *Layard, Ann. Nat. Hist.* 1853, p. 270; *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 402 (1854); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 41 (1863).

Turdus micropus (*Hodgs.*), *Gray, Gen. B.* i. p. 218 (1847).

Cichloselys wardii (*Jerd.*), *Bp. Compt. Rend.* xxxviii. p. 5 (1854); *Hume, Nests & Eggs Ind. B.* p. 231 (1873).

Turdulus wardii (*Jerd.*), *Jerd. B. Ind.* i. p. 520 (1862); *Holdsw. P. Z. S.* 1872, p. 445; *Jerd. Ibis*, 1872, p. 135.

Turdus (Cichloselys) wardii, *Brooks, Str. F.* 1875, p. 237.

Oreocincla pectoralis, *Legge, Str. F.* 1876, p. 244; *Hume, Str. F.* 1877, p. 202.

In the *adult male in spring plumage* the general colour of the upper parts is black; lores and ear-coverts black; eye-stripe very clearly defined, white, extending to the nape; wing-coverts, innermost secondaries, some of the primaries, upper tail-coverts, and most of the tail-feathers more or less conspicuously tipped with white; quills dark brown, the outside webs nearly black, and edged with white for some distance, where they cease to be emarginated. Chin, throat, and breast black; the rest of the underparts white, the feathers on the flanks having broad, irregularly crescentic, transverse, subterminal black bands; axillaries, basal half white, terminal half black edged with white; lower under wing-coverts, basal half black, terminal half white; basal portion of inner web of the secondaries and many of the primaries white. Bill yellow above and below. Wing with the third and fourth primaries nearly equal and longest, second primary between the fifth and sixth, bastard primary 0·9 to 0·7 inch. Legs, feet, and claws pale brownish yellow. Length of wing 4·6 to 4·4 inches, tail 3·3 to 3·1, culmen 1·1 to 0·92, tarsus 1·1 to 1·0.

The *female* has the general colour of the upper parts olive-brown; the eye-stripe and spots on the wing-coverts are smaller and ochraceous; the spots on the innermost secondaries and primaries are absent, and those on the upper tail-coverts confined to a few of the longest, and not quite pure white; the white at the end of the tail-feathers is the same as in the male; the feathers on the throat and upper breast are brownish white, with a narrow black margin, outside which is a fringe of olive-brown; the remainder of the underparts are white, each feather having a transverse crescent-shaped

terminal band, black on the lower breast, brown on the flanks, and obsolete on the centre of the belly; the under tail-coverts are white, margined, except towards the tips, with brown; the white on the under surface of the wing, so characteristic of the genus, is somewhat ochraceous. The *male in first winter plumage* is also apparently somewhat ochraceous on the under surface of the wing and at the tips of some of the greater wing-coverts. *Young in first plumage* have pale shaft-lines to the feathers of the head and back; the terminal spots on the wing-coverts are ochraceous; and the feathers on the throat and breast are ochraceous with broad black terminal bars.

The Pied Ground-Thrush breeds in the Himalayas, from Nepal westwards almost to the confines of Cashmere. In the cold season it migrates to the plains of India, its winter range extending as far south as Ceylon.

a. ♂ ad. sk.	India.	Purchased.
b. ♀ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Oreocincla microptus*, Hodgs.)
c, *d*. ♂ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
e. ♀ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
f. ♂ ad. sk.	Madras.	Dr. Jerdon [P.]. (Type of *Turdus wardii*, Jerd.)
g. ♂ ad. sk.	Madras.	India Museum.
h. ♀ ad. sk.	Ceylon.	Capt. Vincent Legge [P.]. (Type of *Oreocincla pectoralis*, Legge.)

36. Geocichla pinicola.

Turdus pinicola, *Sclater, P. Z. S.* 1859, pp. 334, 362; *id. P. Z. S.* 1860, p. 260; *id. Cat. Amer. B.* p. 6. pl. 1 (1862); *id. P. Z. S.* 1864, p. 172; *Sumichrast, Mem. Bost. Soc. N. H.* i. p. 543 (1869); *Gray, Hand-l. B.* i. p. 258. no. 3771 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873); *Salv. & Godm. Biol. Cent.-Amer. Zool. Aves*, i. p. 23 (1879).

Turdus pœcilopterus, *Licht. Mus. Berol., fide Sclater, Cat. Am. B.* p. 6 (1862, *nec Vigors*).

In the *adult male in spring plumage* the general colour of the upper parts is dark brown, the feathers of the head, nape, and upper back with light shafts and pale outer webs, and the outside and longest upper tail-coverts broadly tipped with buffish white; lores and ear-coverts brown, with paler markings; some of the paler outer webs of the feathers behind and above the eye more pronounced, showing traces of an eye-stripe; outer webs of greater wing-coverts buffish white, except towards their tips; innermost secondaries and primary-coverts paler towards the tips; primaries and secondaries more or less broadly tipped with greyish white; basal third of primaries, a spot at the angle of emargination, and the basal portion of the margin of the outside web of secondaries white; tail dark brown, the outside web of the outside feather on each side white; all the tail-feathers broadly tipped with white, the pale tips becoming narrower and greyer towards the centre of the tail. Chin and upper throat obscurely streaked white, brown, and chestnut; lower throat and breast nearly uniform dark brown;

centre of belly buffish white, shading into brown on the flanks; under tail-coverts pale buff, the longer feathers paler and margined with brown; axillaries pure white, lower under wing-coverts white with brown bases; basal half of inner web of the secondaries and many of the primaries white; inner margin of quills scarcely paler than the rest of the under surface. Bill dark brown above and below. Wing with the third and fourth primaries nearly equal and longest, second primary between the fifth and sixth, bastard primary 0·6 inch. Tail with the outside feathers 0·2 to 0·3 inch shorter than the longest. Length of wing 5·2 to 4·8 inches, tail 3·45 to 3·2, culmen 0·91 to 0·81, tarsus 1·13 to 1·04.

The *female* differs from the male in having the pale markings on the head, nape, upper back, chin, throat, and breast more pronounced. The general colour of both the upper and under parts is also paler. In the *young in first plumage* the pale markings are still more pronounced, and the feathers of the rest of the upper parts have pale chestnut centres and tips, whilst nearly every feather of the underparts is pale ochraceous with a nearly black narrow margin. It is not known that the *autumn plumage* varies much from that of spring.

The Mexican Ground-Thrush appears to be confined to the pine region of South Mexico, where it is supposed to be a resident.

The British Museum does not possess an example of this species; but the descriptions have been taken from skins in the collections of Dr. Sclater and Messrs. Salvin and Godman.

37. Geocichla sibirica.

Turdus sibiricus, *Pall. Reis. Russ. Reich.* iii. p. 694 (1776); *Gmel. Syst. Nat.* i. p. 815 (1788); *Lath. Ind. Orn.* i. p. 333 (1790); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 273 (1818); *Temm. Man. d'Orn.* iii. p. 98 (1835); *Gould, B. Eur.* ii. pl. 82 (1837); *Gray, Gen. B.* i. p. 219 (1847); *Temm. et Schl. Faun. Jap. Aves*, p. 66, pl. xxxi. (1847); *Bp. Consp.* i. p. 274 (1850); *Licht. Nomencl. Av.* p. 26 (1854); *Bp. Compt. Rend.* xxxviii. p. 5 (1854); *Schl. Vog. Nederl.* p. 214 (1854); *Swinh. Ibis*, 1861, p. 410; *Dubois, Ois. Eur.* pl. xlvi. (1862); *Newt. List B. Eur. Blasius*, p. 9 (1862); *Radde, Reis. Sibir. Vög.* p. 233 (1863); *Degl. et Gerbe, Orn. Eur.* i. p. 416 (1867); *Gray, Hand-l. B.* i. p. 256. no. 3718 (1869); *Fritsch, Vög. Eur.* p. 145 (1870); *Swinh. P. Z. S.* 1871, p. 367; *Harting, Handb. Br. B.* p. 101 (1872); *Swinh. Ibis*, 1874, p. 443; *Blyth & Wald. B. Burm.* p. 100 (1875); *Dresser, B. Eur.* pt. l. (1876); *Tacz. Bull. Soc. Zool. France*, i. p. 149 (1876); *David et Oust. Ois. Chine*, p. 149 (1877); *Seebohm, Ibis*, 1879, p. 5; *id. Ibis*, 1880, p. 191.

White-browed Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 31 (1783).

Turdus auroreus, *Pallas, Zoogr. Rosso-Asiat.* i. p. 448 (1811, ♀); *Gloger, Isis*, 1828, p. 1041; *Keys. u. Blas. Wirb. Eur.* pp. ii, 178 (1840); *Gray, Gen. B.* i. p. 218 (1847).

Turdus leucocillus, *Pallas, Zoogr. Rosso-Asiat.* i. p. 450 (1811, ♂); *Newt. List B. Eur. Blasius*, p. 9 (1862).

Turdus bechsteinii, *Naum. Vög. Deutschl.* ii. p. 310, pl. lxix. fig. 2 (1822, ♀).

Turdus atrocyaneus, *Homeyer, Isis*, 1843, p. 604.

Turdus mutabilis, *Temm., fide Bp. Compt. Rend.* xxxviii. p. 5 (1854); *Gray, Hand-l. B.* i. p. 256. no. 3719 (1869).

Cichloselys sibiricus (*Pall.*), *Bp. Cat. Parzud.* p. 5 (1856); *Gould, B. Gt. Br.* ii. pl. xl. (1873).
Oreocincla sibirica (*Pall.*), *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 202 (1859).
Oreocincla inframarginata, *Blyth, J. A. S. Beng.* xxix. p. 103 (1860); *Beavan, Ibis*, 1867, p. 325; *Blyth, Ibis*, 1868, p. 132; *Ball, Stray Feath.* 1873, p. 70.
Turdus inframarginatus (*Blyth*), *Gray, Hand-l. B.* i. p. 254. no. 3694 (1869).
Geocichla mutabilis (*Temm.*), *S. Müller, fide Blyth, Ibis*, 1870, p. 167.
Merula sibirica (*Pall.*), *Dyb. Journ. Orn.* 1872, p. 437; *Tacz. Journ. Orn.* 1874, p. 335.
Turdulus sibiricus (*Pall.*), *Hume, Stray Feath.* vi. p. 255 (1878).
Turdus, sp. inc., *Blakiston & Pryer, Ibis*, 1878, p. 241.

In the *adult male in spring plumage* the general colour of the upper parts is dark slate-grey, each feather slightly darker on the margin; lores, ear-coverts, and head approaching black; a very conspicuous pure-white eye-stripe extending to the nape; innermost secondaries dark slate-grey; quills dark brown, the outer webs margined with dark slate-grey; tail dark brown, several of the outside feathers tipped with white, the outside feather on each side very broadly so. Underparts dark slate-grey, a few feathers in the centre of the belly white; under tail-coverts dark slate-grey, tipped with white; axillaries white, with slate-grey tips; lower under wing-coverts white, with slate-grey bases; basal portion of the secondaries and many of the primaries white; inner margin of quills scarcely paler than the rest of under surface. Bill dark brown above and below. Wing with the third primary slightly the longest, second primary next longest, bastard primary 0·65 to 0·5 inch. Tail with the outside feathers 0·2 inch shorter than the longest. Length of wing 4·9 to 4·4 inches, tail 3·5 to 3·1, culmen 0·93 to 0·81, tarsus 1·23 to 1·12.

The *female* differs from the male in having the upper parts olive-brown, shading into dull slate-grey on the rump and upper tail-coverts; eye-stripe buff, shading into white on the nape; wings and wing-coverts russet-brown; underparts white, shading into brown on the flanks and into buff on the breast, each feather tipped with olive-brown. *Males of the year* are suffused with brown on the head and wings, and have ochraceous tips to the greater and some of the median wing-coverts; the chin and throat are also suffused with ochraceous, and the throat and breast are barred. *Females of the year* have no trace of slate-grey on the upper parts, and have the greater and median wing-coverts tipped with ochraceous, like the male. *Young in first plumage* are unknown.

The Siberian Ground-Thrush breeds in the valleys of the Yenesay and the Lena, between lat. 67° and 68°, and also near Yokohama in Japan. It winters in China, Burma, Sumatra, and Java, and has once occurred on the Andaman Islands.

a. ♂ ad. st.	Japan.	Zoological Society.
b. Juv. st.	Japan.	Zoological Society.
c. Imm. sk.	Java.	Zoological Society.
d. ♀ ad. sk.	Java.	Zoological Society.
e, *f*. ♂ ♀ ad. sk.	Sumatra (*Bock*).	Capt. Wardlaw-Ramsay.

38. Geocichla litsitsirupa.

Merula litsitsirupa, *Smith, Rep. S. Afr. Exp., App.* p. 45 (1836).
Turdus strepitans, *Smith, Ill. Zool. S. Afr., Aves*, pl. xxxvii. (1839); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 269 (1850); *Strickl. & Sclater, Contr. Orn.* 1852, p. 145; *Layard, B. S. Afr.* p. 127 (1867); *Chapman, Trav. S. Afr.* ii. p. 396 (1868); *Ayres, Ibis*, 1869, p. 293; *Gray, Hand-l. B.* i. p. 253, no. 3069 (1869).
Turdus crassirostris, *Licht. Verz. südafr. Th.* p. 14 (1842).
Psophocichla strepitans (*Smith*), *Cab. Journ. Orn.* 1860, p. 182.
Turdus litsitsirupa (*Smith*), *Sharpe, Cat. Afr. B.* p. 20 (1871); *Gurney*, Andersson's B. Dam. Ld.* p. 114 (1872); *Buckley, Ibis*, 1874, p. 309; *Shelley*, Ibis*, 1875, p. 73; *Sharpe, ed. Layard's B. S. Afr.* p. 198 (1876); *Barratt, Ibis*, 1876, p. 201; *Ayres, Ibis*, 1877, p. 343.

In the *adult male in spring plumage* the general colour of the upper parts is ash-grey, shading into pale ash-grey on the upper tail-coverts and into brownish grey on the head; the feathers of the head and upper back with obscure dark centres; lores pale buff; feathers behind the eye and ear-coverts pale buff, tipped with black; quills dark brown, the basal half or more of the inner webs pale chestnut; wing-coverts and innermost secondaries brown, with narrow pale margins; tail dark brown, with narrow pale tips. Underparts nearly white, the feathers on the cheeks, breast, and flanks with bold black pear-shaped terminal spots, which diminish in size on the belly, and disappear altogether on the chin, throat, centre of belly, and under tail-coverts; axillaries and under wing-coverts buff. Bill nearly black, pale at the base of the under mandible. Wing with the second, third, and fourth primaries nearly equal and longest; bastard primary 0·8 to 0·6 inch. Length of wing 5·3 to 4·9 inches, tail 2·95 to 2·65, culmen 1·15 to 0·99, tarsus 1·5 to 1·35.

There appears to be no difference between the sexes, or between summer and winter plumage. *Birds of the year* are unknown. *Young in first plumage* have pale centres and dark terminal bands to the feathers of the back, and pale tips to the wing-coverts and innermost secondaries.

The South-African Ground-Thrush is found in South Benguela, Damara Land, Great Namaqua Land, the Bechuana Country, the Orange Free State, the Transvaal, and Natal. In Damara Land it breeds in October, and is said to be only partially migratory.

a. Ad. st.	Damara Land.	C. J. Andersson, Esq. [C.].
b. Ad. sk.	Kuruman (*Layard*).	R. B. Sharpe, Esq.
c. ♂ ad. sk.	Transvaal (*Ayres*).	R. B. Sharpe, Esq.
d. ♂ ad. sk.	Elands R., Transvaal (*F. Oates*).	C. G. & W. Oates, Esqrs. [P.].
e. ♂ ad. sk.	Potchefstroom, Transvaal.	F. A. Barratt, Esq. [C.].
f. ♀ ad. sk.	Elands R., Transvaal (*F. Oates*).	C. G. & W. Oates, Esqrs. [P.].
g. ♀ ad. sk.	Transvaal (*Ayres*).	R. B. Sharpe, Esq.
h, i. ♂ ♀ ad. sk.	Tati, Matabele Land (*F. Oates*).	C. G. & W. Oates, Esqrs. [P.].
k–m. ♂ ♀ ad. & juv. sk.	Otjimbinque, Damara Land (*Andersson*).	R. B. Sharpe, Esq.
n. ♀ ad. sk.	Capangombe, Anchieta.	R. B. Sharpe, Esq.

* Misspelt *letsitsirupa*.

39. Geocichla simensis.

Merula (Turdus) simensis, *Rüpp. Neue Wirb. Vög.* p. 81, pl. xxix. fig. 1 (1835).
Merula simensis, *Rüpp. Syst. Uebers.* p. 60 (1845).
Turdus simensis (*Rüpp.*), *Gray, Gen. B.* i. p. 219 (1847); *Cab. Mus. Hein.* i. p. 3 (1850); *Gray, Hand-l. B.* i. p. 253. no. 3671 (1869); *Blanf. Geol. & Zool. Abyss.* p. 357 (1870).
Psophocichla simensis (*Rüpp.*), *Cab. Journ. Orn.* 1860, p. 182.
Turdus semiensis (*Rüpp.*), *Heugl. Orn. N.O.-Afr.* i. p. 380 (1869).

This species is very closely allied to the preceding, and differs from it only in having the general colour of the upper parts pale brown instead of pale grey, and in having the white of the breast and flanks suffused with buff. There is no difference in the wing formula; bastard primary 0·85 to 0·7 inch. Length of wing 5·4 to 4·85 inches, tail 2·9 to 2·55, culmen 1·1 to 0·92, tarsus 1·5 to 1·35.

Nothing appears to be known of the difference in the colour of the plumage attributable to sex, age, or season.

The Abyssinian Ground-Thrush is confined to the highlands of Abyssinia, where it is a resident.

a. ♂ ad. sk.	Abyssinia.	R. B. Sharpe, Esq.
b. Ad. sk.	Abyssinia.	R. B. Sharpe, Esq.
c. ♂ ad. sk.	Ankober, Abyssinia (*Sir W. C. Harris*).	India Museum.
d. ♂ ad. sk.	Angollála, Shoa (*Sir W. C. Harris*).	India Museum.
e. ♀ ad. sk.	Adigrat, Abyssinia, April 15, 1868.	W. T. Blanford, Esq. [C.].
f. ♂ ad. sk.	Senafé, Abyssinia, May 25, 1868.	W. T. Blanford, Esq. [C.].

40. Geocichla terrestris.

Turdus terrestris, *Kittlitz, Mém. Ac. Sc. St. Pétersb.* i. p. 245, pl. xvii. (1830).
Geocichla terrestris (*Kittlitz*), *Bp. Consp.* i. p. 268 (1850).
Myiothera passerina, *Bp. Consp.* i. p. 268 (1850).
Cichlopasser terrestris (*Kittlitz*), *Bp. Compt. Rend.* xxxviii. p. 6 (1854).
Zoothera terrestris (*Kittlitz*), *Gray, Hand-l. B.* i. p. 261. no. 3814 (1869).

General colour of the upper parts olive-brown, shading into chestnut-brown on the rump, upper tail-coverts, and tail; the inside web of each feather much darker, approaching black on the back. An obscure pale eye-stripe. Wings olive-brown, the outside webs of the primaries nearly black towards the centre of each feather; wing-coverts mottled with dark brown. Chin, throat, and centre of belly nearly white, shading into brown on the rest of the under-parts, with large obscure darker spots on the breast; under tail-coverts dark brown, with irregular diamond-shaped white tips; axillaries and under wing-coverts brown; basal half of the inner webs of the secondaries and of most of the primaries dirty white. Bill dark brown. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length

between the sixth and seventh, bastard primary 0·8 inch. Length of wing 3·8 inches; tail 2·6; culmen 0·85; tarsus 1·07. Legs, feet, and claws pale.

Nothing is known of any differences of plumage which may be attributed to age, sex, or season.

Kittlitz's Ground-Thrush is a resident in the Island of Bonin, east of Japan.

The British Museum does not possess an example of this species. The above description is taken from a specimen in the Leyden Museum.

2. TURDUS, *Linn.*

	Type.
Turdus, *Linn. Syst. Nat.* i. p. 291 (1766)	T. viscivorus.
Arceuthornis, *Kaup, Nat. Syst.* p. 93 (1829)	T. pilaris.
Ixocossyphus, *Kaup, Nat. Syst.* p 145 (1829)	T. viscivorus.
Planesticus, *Bonap. Compt. Rend.* xxxviii. p. 3 (1854)	T. jamaicensis.
Malacocichla, *Gould, P. Z. S.* 1854, p. 285	T. dryas.
Iliacus, *Des Murs, Ool. Ornith.* p. 293 (1860)	T. iliacus.
Hylocichla (subgenus), *Baird, Review*, p. 12 (1864)	T. mustelinus.

The genus *Turdus* is very closely connected by intermediate links with the genus *Merula*, but as they both comprise a large number of species, the majority of which possess well-marked characters, it seems advisable to keep them distinct. In all the species of the genus *Turdus* the plumage of the male resembles that of the female, and the throat, breast, and flanks are more or less spotted at all ages. The bill is moderately stout, about the length of the head, somewhat widened at the base, and furnished with rictal bristles. The bastard primary rarely extends beyond the primary-coverts; and the wing is generally comparatively flat and pointed. The tail is nearly even, and always consists of twelve feathers.

So far as I have been able to ascertain, the young in first plumage of every species in this genus are spotted on the back and breast; and I have never found them with a scutellated tarsus, except in the young of one or two species. The spring moult appears to be confined to the replacement of a few injured feathers.

In summer these birds are principally ground-feeders, living upon worms and insects; but in autumn and winter they chiefly frequent bushes and trees in search of fruit and berries. Their legs and feet are strong and generally pale in colour.

The spotted plumage of the young is lost on the upper parts at the first autumn moult before migration; but traces of it can generally be detected on the wing-coverts of birds of the year.

This genus is by no means cosmopolitan. Five species are known to breed in the Palæarctic region. Two of these encroach upon the Indo-Chinese subregion, which is otherwise unrepresented in this genus, as are also the Indo-Malayan subregion and the entire Australian region. The Æthiopian region contributes nine species, the Nearctic region ten, and the Neotropical region twenty-four.

A comparison of this geographical distribution with that of the genus *Merula* is an additional argument for the advisability of keeping the two genera distinct.

J.G. Keulemans del. Mintern Bros. imp.

Cettia brunneifrons.

and flanks; axillaries buffish white; under wing-coverts buffish white, clouded with brown; inner margin of quills pale brown. Bill dark brown, paler at the base of the under mandible. Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary about equal to the eighth; bastard primary 0·6 inch long, slightly less than half the length of the second primary. Tail shorter than the wing, the outside feathers 0·24 inch shorter than the longest. Legs, feet, and claws pale horn-colour. Length of wing 2·1 to 2·0 inches, tail 1·05, culmen 0·53, tarsus 0·7.

Nothing is known of any differences which may be produced in the colour of the plumage by age, sex, or season.

Swinhoe's Bush-Warbler breeds in some unknown district of North-eastern Asia, and winters in South China, Formosa, and the Tenasserim provinces.

The British Museum does not possess an example of this species. The above description is taken from a skin in my collection dated Formosa, March 1866. The type, from Canton (without a tail), is missing.

9. Cettia ussurianus.

Horornis squamiceps (*Swinh.*) *apud Tacz. Journ. Orn.* 1875, p. 245; *apud Tacz. Bull. Soc. Zool. France*, 1876, p. 137; *apud Tacz. Journ. Orn.* 1876, p. 194.

This species differs from the preceding in having the general colour of the upper parts olive-brown instead of chocolate-brown, darkest on the head. Bill dark brown, paler at the base of the under mandible. Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary about equal to the eighth; bastard primary 0·5 inch. Tail shorter than the wing, the outside feathers 0·14 inch shorter than the longest. Legs, feet, and claws pale horn-colour. Length of wing 2·04 inches, tail 1·1, culmen 0·5, tarsus 0·7.

Nothing is known of any difference which may be produced in the colour of the plumage by age, sex, or season.

Taczanowsky's Bush-Warbler breeds in Eastern Siberia in the valley of the Ussuri. Its winter quarters are unknown.

The British Museum does not possess a skin of this species. The type, in my collection, is dated May 25, 1874, and is sexed as a male by Dr. Dybowsky.

10. Cettia brunneifrons.

Horeites brunnifrons, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 62*a*. fig. 1, no. 836, *undè Hodgs. Gray's Zool. Misc.* p. 82. no. 836 (1844, *descr. null.*); *Blyth, J. A. S. Beng.* xiv. p. 585 (1845); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* pp. 65, 151 (1846); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 323 (1854); *Jerd. B. Ind.* ii. p. 163 (1863); *Swinhoe, P. Z. S.* 1871, p. 351; *Brooks, J. A. S. Beng.* xli. pt. ii. p. 78 (1872); *David et Oust. Ois. Chine*, p. 263 (1877).

Horeites pollicaris, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 62. no. 848, *undè Hodgs. Gray, Zool.*

Misc. p. 82. no. 848 (1844, *descr. null.*); *Blyth, J. A. S. Beng.* xiv. pt. ii. p. 585 (1845); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 65 (1846); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 322 (1854); *Jerd. B. Ind.* ii. p. 163 (1863).

Horeites schistilatus, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 62*a*. fig. 2, *unde*

Nivicola schistilata, *Hodgs. Gray's Zool. Misc.* p. 82. no. 860 (1844, *descr. null.*); *Blyth, J. A. S. Beng.* xiv. pt. ii. p. 586 (1845).

Orthotomus (Prinia) brunnifrons, *Hodgs. P. Z. S.* 1845, p. 29 (*descr. prim.*).

Orthotomus (Horeites) pollicaris, *Hodgs. P. Z. S.* 1845, p. 30.

Orthotomus (Horeites) schistilatus, *Hodgs. P. Z. S.* 1845, p. 30.

Horeites schistilatus (*Hodgs.*), *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 65 (1846); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 323 (1854).

Drymoica schistilata (*Hodgs.*), *Gray, Gen. B.* i. p. 164 (1848).

Drymoica pollicaria (*Hodgs.*), *Gray, Gen. B.* i. p. 164 (1848).

Horeites brunneifrons (*Hodgs.*), *Bp. Consp.* i. p. 281 (1850).

Horeites pollicaria (*Hodgs.*), *Bp. Consp.* i. p. 281 (1850).

Prinia brunneifrons (*Hodgs.*), *Gray, Hand-l. B.* i. p. 196. no. 2709 (1869).

Prinia schistilata (*Hodgs.*), *Gray, Hand-l. B.* i. p. 196. no. 2710 (1869).

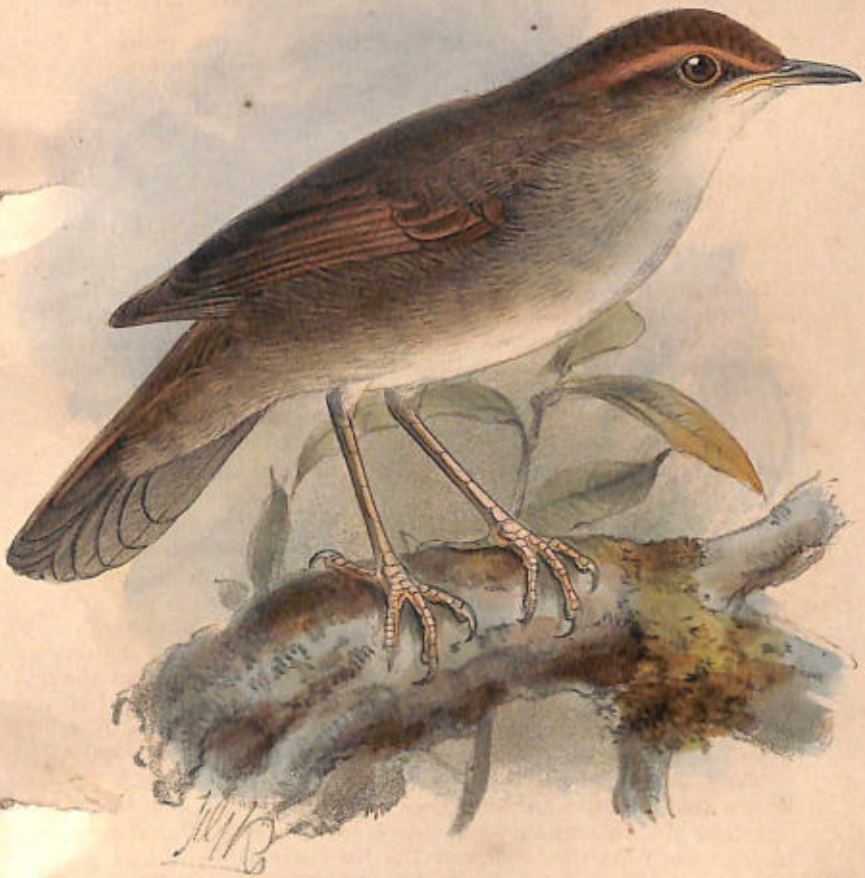
Prinia pollicaria (*Hodgs.*), *Gray, Hand-l. B.* i. p. 196. no. 2711 (1869).

Cettia brunneifrons (*Hodgs.*), *Seebohm, Ibis*, 1879, p. 36.

General colour of the upper parts dark russet-brown, shading into dark rich coffee-colour on the nape and head; lores and the feathers behind the eye dark brown; eye-stripe buffish white, well defined and extending to the nape; wings and tail dark russet-brown, the outside webs edged with russet-brown. Chin and centre of belly nearly white, shading into ash-grey on the sides of the neck and breast, and into russet-brown on the flanks, thighs, and under tail-coverts; axillaries and under wing-coverts nearly white, the latter mottled with dark brown on the shoulder; inner margin of quills pale buffish brown. Bill Phylloscopine; upper mandible dark brown, under mandible pale horn-colour, shading into dark brown at the tip; rictal bristles small. Wing considerably concave, the fourth, fifth, and sixth primaries nearly equal and longest; second primary considerably shorter than the secondaries; first primary more than half the length of the second. Tail shorter than the wing, the outside feathers 0·6 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 1·95 to 1·7 inch, tail 1·8 to 1·5, culmen 0·45 to 0·4, tarsus 0·75 to 0·73.

In some skins the rich coffee-colour of the head is not quite so dark as in others; these I take to be *females*. It is not known that there is any difference between summer and winter plumage. In what are supposed to be *birds of the year* (*H. pollicaris*, Hodgs.) the rich coffee-colour of the head is entirely absent, the upper parts being of a uniform dark russet-brown, and the white and ash-grey of the underparts are replaced by light and dark brownish yellow.

The Nepalese Bush-Warbler breeds at high elevations on the



J.G.Keulemans del. Mintern Bros imp.

Cettia major.

Himalayas (Nepal, Sikkim, &c.) and the mountains of Chinese Thibet (Moupin), descending some distance into the valleys during the cold season.

a. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Orthotomus* (*Prinia*) *brunneifrons*, Hodgs.)
b, *c*, *d*, *e*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
f. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Orthotomus* (*Horeites*) *schistilatus*, Hodgs.)
g, *h*, *i*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
k. Juv. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Orthotomus* (*Horeites*) *pollicaris*, Hodgs.)
l. Juv. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
m. Ad. sk.	Darjeeling.	W. Fotheringham, Esq. [P.].

11. Cettia major. (Plate VII.)

Horeites major, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Appendix*, pl. 42. no. 946 (*icon. ined.*); *Moore, P. Z. S.* 1854, p. 105 (*descr. prim.*); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 323 (1854); *Jerd. B. Ind.* ii. p. 164 (1863); *David et Oust. Ois. Chine*, p. 263 (1877).
Prinia major (*Hodgs.*), *Gray, Hand-l. B.* i. p. 196. no. 2712 (1869).
Cettia major (*Moore*), *Seebohm, Ibis*, 1879, p. 36.

General colour of the upper parts dark olive-brown, shading into dark rich coffee-colour on the nape and head; lores dark russet-brown; eye-stripe pale brown, somewhat indistinct and extending to the nape; wings and tail dark russet-brown, the outside webs edged with dark olive-brown. Chin and centre of belly nearly white, shading into ashy brown on the breast and into olive-brown on the flanks, thighs, and under tail-coverts; axillaries and under wing-coverts yellowish white; inner margin of quills pale grey. Bill Phylloscopine, dark brown, the under mandible paler at the base; rictal bristles moderately developed. Wing considerably concaved, with the fifth and sixth primaries nearly equal and longest; second primary somewhat shorter than the secondaries; bastard primary considerably more than half the length of the second. Tail shorter than the wing; outside feathers 0·4 inch shorter than the longest. Legs, feet, and claws pale brown. Length of wing 2·63 to 2·41 inches, tail 2·24 to 2·0, culmen 0·56 to 0·55, tarsus 1·02.

The above description is that of *winter* plumage. It is not known if the summer plumage varies, or if there is any difference between the sexes or *birds of the year*.

Moore's Bush-Warbler is probably a partial migrant, breeding at or near the limit of forest-growth on the Himalayas (Nepal, Sikkim, &c.) and the mountains of Chinese Thibet (Moupin), descending into the valleys in the cold season.

a. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Horeites major*, Moore.)

Subfamily TURDINÆ.

Key to the Genera.

a. Wing Geocichline or Psophocichline (see woodcuts, pp. 147, 182) ..... 1. Geocichla, p. 147.

b. Wing without any well-defined pattern underneath.

a'. Adult male and female alike in colour, except that the female is occasionally slightly paler than the male. Chin and upper throat of adult male streaked. Tail not Mimocichline. General colour not black ..... 2. Turdus, p. 184.

b'. Tail Mimocichline (see woodcut, p. 280) .. 4. Mimocichla, p. 280.

c'. Chin and upper throat of adult male unstreaked, or, if streaked, male and female differing completely in colour, or general colour black.

a''. Legs generally pale; bill of adult male never black. Bill stout, never less than 0·9 inch ..... 3. Merula, p. 232.

b''. Legs and bill generally black; if pale, culmen less than 0·8 inch.

a'''. General colour of underparts slate-grey, shading only into brown or white. Legs never black ..... 5. Catharus, p. 283.

b'''. Throat generally brilliant in colour, and frequently in violent contrast to the cheeks; if not, legs pale ..... 6. Erithacus, p. 292.

c'''. Culmen stout, measuring 0·74 inch or longer. Under tail-coverts blue or chestnut ..... 7. Monticola, p. 312.

d'''. Culmen much less than one fourth the length of the tail: second primary nearly equal to the third; general colour blue, or blue and chestnut ..... 8. Sialia, p. 327.

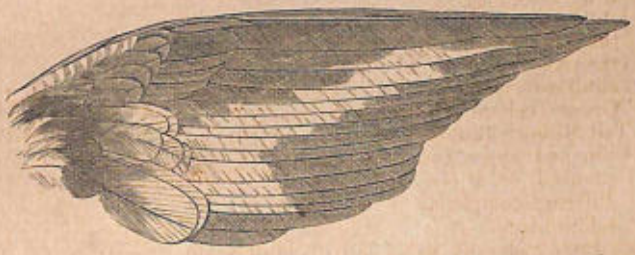
e'''. Culmen slender, measuring 0·61 inch or shorter, and less than one fourth the length of the tail, which is usually chestnut. Legs always black ..... 9. Ruticilla, p. 334.

f'''. Second primary marginated at the tip, and tail semi-Saxicoline (see woodcuts, pp. 354, 358, 359), or tail uniform black or brown. Legs black or dark brown. Throat and cheeks similar in colour. Tail not more than four times the length of the culmen ..... 10. Myrmecocichla, [p. ...]

g'''. Culmen more than one fourth the length of the tail. Rump, upper tail-coverts, and base of tail generally white, rarely chestnut. Legs always black. Throat never blue ..... 11. Saxicola, p. 362.

1. GEOCICHLA.

	Type.
Geocichla, *Kuhl* (reference unknown *)	G. interpres.
Zoothera, *Vigors*, *P. Z. S.* 1831, p. 172	G. monticola.
Oreocincla, *Gould*, *P. Z. S.* 1837, p. 145	G. varia.
Turdulus, *Hodgs. Gray's Zool. Miscell.* p. 83 (1844) ..	G. wardii.
Cichlopasser, *Bp. Compt. Rend.* xxxviii. p. 6 (1854) ..	G terrestris.
Chamætylas, *Heine, Journ. Orn.* 1859, p. 425	G. compsonata.
Psophocichla, *Cab. Journ. Orn.* 1860, p. 182	G. simensis.



Wing of *Geocichla varia*.

The genus *Geocichla* comprises a well-defined group of forty Thrushes, which may be distinguished as Ground-Thrushes. They are characterized by having the basal portion of the outside web of all the secondaries and of many of the primaries white, occasionally tinted with buff, but abruptly defined from the brown of the rest of the quills. The axillaries are parti-coloured, the basal half being white, and the terminal half black, slate-grey, or brown. Most of the under wing-coverts are similarly parti-coloured, but the relative position of the colours is reversed, the white portion being on the terminal half. This genus is connected with the genus *Turdus* through *T. viscivorus* and *T. mustelinus*. In the former the base of the inner webs of most of the quills is white, but gradually shading into, and not abruptly defined from, the brown of the rest of the quills; the axillaries and under wing-coverts are pure white. In the latter the axillaries have brown centres, and the under wing-coverts brown bases. These two genera are also connected by the aberrant species of the genus *Geocichla*. Of these the most aberrant are *G. simensis* and *G. litsitsirupa*, which have the axillaries and under wing-coverts uniform in colour; but the pale portions of the inner webs of the quills are greatly developed and very abruptly defined. *G. pinicola* is also slightly aberrant in having the axillaries a uniform white.

So far as I have been able to ascertain, the young in first plumage of every species in this genus are spotted on the back and breast; and I am not aware that the adult of any species has a scutellated tarsus, though traces of it are to be found in young *G. litsitsirupa*. Nor does any species seem to have a spring moult beyond the replacement of a few injured feathers.

* Said to be in some popular Dutch periodical.

All the Thrushes are principally ground-feeders, especially in summer; but the species of this genus are *par excellence* Ground-Thrushes, being still less frequently found in trees than their near allies. Their legs and feet are strong, and pale in colour.

The bill is moderately stout, about the length of the head, somewhat widened at the base, and more or less furnished with rictal bristles. In two species it is abnormally short; and in four species it is abnormally long and depressed at the base. The bastard primary rarely exceeds an inch in length, and is frequently shorter than the primary-coverts. The wing is more or less rounded, as the species are more or less sedentary in their habits.

The tail is nearly even, and consists of twelve feathers, except in three species, which have fourteen tail-feathers. In some species the sexes are alike, whilst in others they are different. In some species the spotted plumage, characteristic of young in first plumage in this family, is retained through life, whilst in others it is retained only on some of the wing-coverts after the first autumn moult. In others it is entirely lost at that time. On the whole this genus must be considered one of the best-defined of the family *Turdidæ*.

No species of this genus is found in Europe or in South America, except accidentally on migration. On the other hand, it is the only genus of the family found in Australia, where it is represented by three species. New Guinea, Lombock, Timor, and Celebes each add a species to the genus. Three more species are found in Java, whilst a fourth is found both in Java and Lombock. Two are peculiar to Ceylon. India and Burma add ten species to the genus, whilst the islands in the Bay of Bengal add two more. In Eastern Siberia this genus is represented by two species; whilst a third has crossed the straits and established itself in western North America, and a fourth has wandered as far as the mountains of Mexico. No less than eleven species have been found on the African continent, and probably others remain to be discovered.

Key to the Species.

A. Feathers of the head and back with a transverse terminal black band, in strong contrast to the brown general colour of the upper parts.
(Subgeneric group OREOCINCLÆ.)

a. Tail-feathers fourteen.

a'. Second primary intermediate in length between the fourth and fifth. Length of wing 6·4 to 5·9 inches. General colour of the upper parts olive-brown, with traces of pale ochraceous-brown subterminal spots on the feathers of the head and back .... *varia*, p. 151.

b'. Second primary intermediate in length between the fifth and sixth. Length of wing 5·4 inches. General colour of the upper parts ochraceous brown, with traces of paler subterminal spots on the feathers of the head only ..... *horsfieldi*, p. 153.

c'. Second primary equal to the fifth. Length of wing 6·7 inches. General colour of the upper parts greyish brown, with traces of paler subterminal spots on the feathers of the head and back ..... *hancii*, p. 153.

b. Tail-feathers twelve.

d'. General colour of the underparts, especially the belly and under tail-coverts, white, barred on the breast and flanks with black.

a''. Outside tail-feathers with obscurely defined white tips.

a'''. General colour of upper parts olive-brown, with subterminal pale ochraceous spots on each feather, very distinct on the head. Second primary half an inch longer than the sixth ..... *dauma*, p. 154.

b'''. General colour of upper parts russet-brown. Subterminal spots on the head chestnut-brown, almost obsolete on the back. Second primary between the fifth and sixth. Basal portion of inside web of the secondaries and of many of the primaries white ..... *nilgiriensis*, p. 157.

c'''. General colour of upper parts dark olive-brown. Subterminal spots on the head and back obsolete. Second primary equal to the sixth ..... *lunulata*, p. 155.

d'''. General colour of upper parts russet-brown. Subterminal spots on the head ochraceous brown, almost obsolete on the back. Second primary equal to the sixth. Basal portion of inside web of the secondaries and of many of the primaries buff..... *macrorhyncha*, p. 156.

b''. Outside tail-feather on each side tipped with white on the inner web for an inch or more.

e'''. Subterminal spots on feathers of head and nape obsolete. Length of wing 4·9 to 4·7 inches ..... *heinii*, p. 157.

f'''. Subterminal spots on feathers of crown and nape ochraceous brown. Length of wing 4·4 inches ..... *papuensis*, p. 158.

c'. General colour of the underparts, including the belly and under tail-coverts, ochraceous buff, barred on the breast and flanks with black ..... *imbricata*, p. 159.

B. Upper parts without spots, except occasionally on the wing-coverts. Spots on the underparts crescentic. Sexes alike. (Subgeneric group OREOCINCLOIDÆ.)

c. Upper parts russet-brown; traces only of spots on the wing-coverts; tail 4·1 to 3·7 inches.. *mollissima*, p. 159.

d. Upper parts suffused with olive; conspicuous spots on wing-coverts; tail 4·7 to 4·3 inches *dixoni*, p. 161.

C. Upper parts without spots. Underparts spotted on the throat, breast, and flanks with fan-shaped or diagonal spots. Culmen longer than the head. (Subgeneric group ZOOTHERÆ.)

e. Culmen longer than the tarsus.

f'. Upper parts dark slate-grey ..... *monticola*, p. 161.

g'. Upper parts russet-brown ..... *marginata*, p. 162.

f. Culmen shorter than the tarsus ..... *andromeda*, p. 162.

D. Upper parts without spots, except on the wing-coverts, many of which are nearly black, with very conspicuous white tips. No trace of eye-stripe. Underparts frequently spotted on the throat, breast, and flanks. Sexes alike. (Subgeneric group TURDULI.)

g. Bill short, the height at the nostrils nearly half the length of the culmen.

h'. Chin white ..... *princei*, p. 164.

i'. Chin dark cinereous ..... *compsonota*, p. 165.

h. Bill moderately long, the height at the nostrils less than one third the length of the culmen.

k'. Breast and flanks spotted.

e''. Throat black.

g'''. Upper parts chestnut, in strong contrast to the nearly black wings and tail. *erythronota*, p. 165.

h'''. Head and nape chestnut. Back, rump, wings, and tail brown or slate-grey.

a^1. Greater wing-coverts with white tips *interpres*, p. 166.

b^1. Greater wing-coverts uniform dark brown ..... *arensis*, p. 167.

d''. Throat white, more or less obscurely spotted with black.

i'''. Length of wing 3¾ to 4 inches. Upper tail-coverts russet-brown. Second primary much shorter than the seventh. *spiloptera*, p. 167.

k'''. Length of wing 4½ inches. Upper tail-coverts olive-brown. Second primary much longer than the seventh ..... *guttata*, p. 168.

l'. Underparts unspotted.

e''. Chin and throat white, or nearly so.

l'''. General colour of the upper parts chestnut ..... *peronii*, p. 169.

m'''. General colour of the upper parts russet-brown ..... *bivittata*, p. 169.

f''. Chin and throat orange-chestnut.

n'''. Back olive-brown.

c^1. Forehead dark olive-brown ..... *gurneyi*, p. 170.

d^1. Forehead orange-chestnut ..... *piaggii*, p. 171.

o'''. Back russet-brown ..... *crossleyi*, p. 171.

E. Upper parts slate-grey, each feather with obscure darker margins. Wing-coverts pale slate-grey, with or without white tips. No trace of eye-stripe. Underparts unspotted. Sexes alike on underparts. (Subgeneric group GEOCICHLÆ.)

i. Median wing-coverts tipped with white.

m'. Chin and throat white. Ear-coverts white, crossed by two diagonal brown bars .... *cyanonotus*, p. 171.

n'. Chin, throat, and ear-coverts orange-chestnut.
g''. Length of wing 4·8 to 4·4 inches. Underparts and head orange-chestnut.. *citrina*, p. 172.
h''. Length of wing 4·4 to 4 inches. Underparts and head dark orange-chestnut .. *rubecula*, p. 174.
k. Wing-coverts uniform slate-grey.
o'. Head and nape brownish chestnut. Chin greyish white; throat orange-chestnut. Second primary between the sixth and seventh. Length of wing 4·2 to 3·8 inches *andamanensis*, p. 175.
p'. Head and nape rich dark orange-chestnut. Chin and upper throat nearly white. Second primary between the sixth and seventh. Length of wing 4·2 to 3·9 inches ..... *albogularis*, p. 175.
q'. Head and nape rich dark orange-chestnut. Chin, throat, breast, and flanks orange-chestnut. Second primary equal to or slightly longer than the sixth. Length of wing 4·8 to 4·55 inches ..... *innotata*, p. 176.

F. Sexes different. A more or less distinct eye-stripe. Adult male with the chin, throat, and breast unspotted. (Subgeneric group HESPEROCICHLÆ.)
l. Wing-coverts or innermost secondaries with pale tips.
r'. Eye-stripe very distinct.
i''. Eye-stripe, throat, and tips of greater and median wing-coverts chestnut ..... *nævia*, p. 176.
k''. Eye-stripe and tips of greater and median wing-coverts white. Throat black in male, white spotted with black in female ..... *wardii*, p. 178.
s'. Eye-stripe indistinct; primaries white at base of outside web ..... *pinicola*, p. 179.
m. Wing-coverts and innermost secondaries slate-grey in male, brown in female; almost uniform in colour..... *sibirica*, p. 180.

G. Axillaries uniform buff; the buff patch on the inner webs of the quills extending onto the second and third primaries. (Subgeneric group PSOPHOCICHLÆ.)
n. Breast and flanks nearly white, spotted with black. General colour of upper parts pale grey..... *litsitsirupa*, p. 182.
o. Breast and flanks buff, spotted with black. General colour of upper parts pale brown .. *simensis*, p. 183.

H. Upper parts longitudinally streaked. (Subgeneric group CICHLOPASSERES.) *terrestris*, p. 183.

1. Geocichla varia.

Turdus varius, *Pall. Zoogr. Rosso-As.* i. p. 449 (1811); *Macg. Brit. B.* ii. p. 146 (1839); *Sund. Vet. Ak. Handl.* 1840, p. 37; *Temm. Man. d'Orn.* iv. p. 602 (1840); *Werner, Atlas, Insectiv. App.* pl. 7 (1842); *Sund. Isis*, 1845, p. 119; *Homeyer, Rhea*, 1849, p. 144; *Kjærb. Danm. Fugl.* p. 134 (1852); *Sund. Svensk. Fogl.* pl. lxvii. fig. 1 (1856); *Radde, Reis. Sibir., Vög.* p. 231 (1863); *Gray, Hand-l. B.* i. p. 254. no. 3687 (1869); *Newt. ed. Yarr. Brit. B.* i. p. 251 (1872); *Tweeddale, P. Z. S.* 1878, p. 429; *Dresser, B. Eur.* pt. lxxii. (1878).

Turdus aureus, *Holandre, Ann. de Verr.* 1825, p. 310; *Schinz, Eur. Faun.* i. p. 161 (1840); *Dubois, Journ. Orn.* 1856, p. 237; *Degl. et Gerbe, Orn. Eur.* i. p. 420 (1867).
Turdus squamatus, *Boie, Isis*, 1835, p. 251.
Turdus whitei, *Eyton, Rarer Brit. B.* p. 92 (1836); *Gould, B. of Eur.* ii. pl. 81 (1837); *Keys. u. Blas. Wirb. Eur.* pp. lii et 179 (1840); *Yarr. Brit. B.* ed. i. p. 184 (1843); *Sch. Rev. Crit.* pp. xli et 70 (1844); *Gray, Gen. B.* i. p. 218 (1847); *Temm. et Schl. Faun. Japon.* p. 67 (1847); *Naum. Vög. Deutschl.* xiii. pl. 354 (1860).
Oreocincla whitei (*Eyton*), *Gould, P. Z. S.* 1837, p. 136; *Bp. Comp. List B. Eur. & N. Amer.* p. 17 (1838).
Oreocincla varia (*Pall.*), *Gould, P. Z. S.* 1837, p. 136; *Cab. Mus. Hein.* i. p. 6 (1850); *Sund. Journ. Orn.* 1857, p. 160; *Swinhoe, P. Z. S.* 1871, p. 367; *Tacz. Bull. Soc. Zool. France*, 1876, p. 146; *David et Oust. Ois. Chine*, p. 158 (1877); *Prjev. Rowl. Orn. Misc.* ii. p. 200 (1877).
Oreocincla aurea (*Hol.*), *Bonap. Cat. Occ. Eur.* p. 34, no. 136 (1842); *id. Consp.* i. p. 362 (1850); *id. Rev. et Mag. Zool.* 1857, p. 205; *Tomes, Ibis*, 1859, p. 379; *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 202 (1859); *Gould, B. Gt. Br.* ii. pl. 39 (1873).
Turdus lunulatus, *Lath. apud Blas. List B. Eur.* p. 9 (1862).
Turdus daunia, *Lath. apud Pelzeln, Verh. k. k. zool.-bot. Gesell. Wien*, 1871, p. 703.

In the *adult male in spring plumage* the general colour of the upper parts is ochraceous brown, each feather having a transverse terminal crescent-shaped black band; most of the feathers have pale shafts and a more or less distinct ochraceous transverse subterminal band, very conspicuous on the head and neck; lores greyish white; no trace of eye-stripe; wing-coverts and innermost secondaries shading from dark olive-brown on the inside webs to ochraceous brown on the outside webs, but, with the exception of the primary-coverts, wanting the black terminal bands; quills brown, the outside webs ochraceous brown; four central and terminal portion of two outside tail-feathers on each side ochraceous brown, the remaining three on each side very dark olive-brown; five outside tail-feathers on each side more or less distinctly tipped with white, and all more or less obscurely barred. Underparts white, with a more or less distinct tinge of ochraceous on the breast, each feather with a transverse terminal crescent-shaped black band, nearly obsolete on the chin, centre of belly, and under tail-coverts; axillaries, basal half white, terminal half black; under wing-coverts, basal portion black, terminal portion white; basal half of inner web of secondaries and basal portion of many of the primaries pale buff. Bill dark brown above, basal half of under mandible pale yellowish brown. Wing with the third and fourth primaries nearly equal and longest, second primary between the fourth and fifth, bastard primary 1·05 to 0·9 inch. Legs, feet, and claws pale yellowish brown. Length of wing 6·4 to 5·9 inches, tail 4·5 to 4·15, culmen 1·3 to 1·1, tarsus 1·4 to 1·3.

It is not known that there is any difference in the colour of the plumage of the sexes, or in consequence of the *autumn moult*. *Birds of the year* and *young in first plumage* are unknown.

3/4

J. G. Keulemans del. Mintern Bros. imp.

Geocichla horsfieldi.

Key to the Species.

A. A considerable number of spots on the underparts, especially on the throat, breast, and flanks, one species only having the spots on the flanks nearly obsolete. (Subgeneric group TURDI.)

(NEOTROPICAL SPECIES.)

a. Tail olive-brown.
a'. Spots on the breast and flanks crescentic or semilunar.
a''. Second primary shorter than the seventh.
a'''. Upper parts olive-brown ..... *maranonicus*, p. 188.

(ÆTHIOPIAN SPECIES.)

b'''. Upper parts chocolate-brown ..... *bewsheri*, p. 188.
b''. Second primary equal to or longer than the fifth ..... *olivaceofuscus*, p. 189.
b'. Spots on the breast and flanks fan-shaped.

(PALÆARCTIC SPECIES.)

c''. Axillaries chestnut; eye-stripe well-defined ..... *iliacus*, p. 189.
d''. Axillaries rich buff; eye-stripe very indistinct.
c'''. Second primary shorter than the sixth ..... *auritus*, p. 193.
d'''. Second primary longer than the fifth *musicus*, p. 191.
e''. Axillaries pure white; eye-stripe obsolete ..... *viscivorus*, p. 194.

(NEARCTIC SPECIES.)

f''. Axillaries dull buff, suffused with brown; eye-stripe very indistinct.
e'''. Upper parts olive-brown.
*a*⁴. Ground-colour of chin, cheeks, and ear-coverts buff ..... *swainsoni*, p. 201.
*b*⁴. Ground-colour of chin, cheeks, and ear-coverts white ..... *aliciæ*, p. 202.
f'''. Upper parts rufescent olive-brown.. *ustulatus*, p. 203.
g''. Axillaries brown, tipped and based with white ..... *mustelinus*, p. 196.
b. Tail russet-brown.
c'. Upper parts uniform russet-brown. Spots on breast small and pale..... *fuscescens*, p. 203.
d'. Upper tail-coverts and tail russet-brown; rest of upper parts olive-brown. Spots on breast large and dark.
h''. Upper parts rufous olive-brown ..... *pallasi*, p. 199.
i''. Upper parts olive-brown.
g'''. Length of wing 4·25 to 3·70 inches . *auduboni*, p. 198.
h'''. Length of wing 3·85 to 3·30 inches . *aonalaschkæ*, p. 200.
c. Tail black, sometimes suffused with slate-grey.

(NEOTROPICAL SPECIES.)

e'. Axillaries olive-brown ..... *dryas*, p. 204.

(PALÆARCTIC SPECIES.)

f'. Axillaries white..... *pilaris*, p. 205.

B. Spots on the underparts confined to the chin, cheeks, or upper throat. (Subgeneric group PLANESTICI.)

(NEOTROPICAL SPECIES.)

d. A conspicuous white patch on the centre of the throat, between the spotted chin and upper throat and the brown lower throat and breast.
g'. Axillaries pale slate-grey
k''. Back slate-grey ..... *jamaicensis*, p. 208.
l''. Back chocolate-brown ..... *phæopygus*, p. 208.
h'. Axillaries varying from buff to chestnut.
m''. Flanks chestnut-brown ..... *albicollis*, p. 209.
n''. Flanks olive or neutral brown.
i'''. Longest upper tail-coverts and tail suffused with slate-grey, in strong contrast to the russet-brown back.. *crotopezus*, p. 210.
k'''. Back, rump, and upper tail-coverts yellowish olive-brown..... *tristis*, p. 211.
l'''. Back, rump, and upper tail-coverts dark slate-grey, with a slight trace of olive ..... *leucauchen*, p. 212.
e. No conspicuous white patch across the throat.
i'. Legs and feet dark brown.
o''. No chestnut on flanks.
m'''. General colour of underparts neutral brown.
*a*⁴. Bill yellow.
*a*⁵. A small space behind the eye bare of feathers ..... *gymnophthalmus*, p. 212.
*b*⁵. No bare space behind the eye .. *leucomelas*, p. 213.
*b*⁴. Bill black.
*c*⁵. Nape same colour as back; axillaries slightly tinted with chestnut.
*a*⁶. Centre of belly and under tail-coverts white ..... *ignobilis*, p. 214.
*b*⁶. Belly and under tail-coverts brown ..... *plebeius*, p. 215.
*d*⁵. Nape greyer than back; axillaries rich orange-chestnut .... *albiventer*, p. 215.
n'''. General colour of underparts russet-brown or buff.
*e*⁴. Upper parts russet-brown or chocolate-brown.
*e*⁵. Upper parts ochraceous brown. Centre of belly and tips of under tail-coverts nearly white, contrasting with the ochraceous lower parts and bases of under tail-coverts ..... *fumigatus*, p. 216.
*f*⁵. Upper parts dark chestnut-brown. Centre of belly and tips of under tail-coverts nearly white, contrasting with the dull russet-brown flanks and bases of under tail-coverts ..... *hauxwelli*, p. 217.

g^3. Upper parts very dark russet-brown. Centre of belly and under tail-coverts pure white (the latter with concealed brown bases), contrasting with the russet-brown flanks ..... *obsoletus*, p. 218.

h^3. Upper parts dark russet-brown. Belly and under tail-coverts whitish, with dark shaft-lines to each feather, a character more or less traceable on the whole of the underparts ..... *nigrirostris*, p. 218.

i^3. Upper parts pale russet-brown. Breast, flanks, belly, and under tail-coverts nearly uniform pale buffish brown ..... *cæsius*, p. 220.

d^4. Upper parts olive-brown ..... *grayi*, p. 219.

(NEARCTIC SPECIES.)

e^4. Upper parts greyish brown ..... *confinis*, p. 222.

p''. Flanks and belly chestnut.

o'''. Breast chestnut ..... *migratorius*, p. 220.

(NEOTROPICAL SPECIES.)

p'''. Breast pale brown ..... *rufiventer*, p. 222.

k'. Legs and feet orange or yellow.

q''. Head much darker than back.

q'''. Rump russet-brown ..... *falklandicus*, p. 224.

r'''. Rump dull slate-grey ..... *magellanicus*, p. 223.

r''. Head nearly the same colour as the back.

s'''. Nape and rump slate-grey; mantle ochraceous brown ..... *flavirostris*, p. 225.

t'''. Upper parts nearly uniform in colour.

f^4. Under tail-coverts with conspicuous white shaft-streaks.

k^5. Flanks and belly brown ..... *chiguanco*, p. 225.

(ÆTHIOPIAN SPECIES.)

l^5. Belly and flanks orange-chestnut.

c^6. Upper parts palish slate-grey. *tephronotus*, p. 226.

d^6. Upper parts dull olive-brown.

a^7. Ground-colour of chin and throat nearly white..... *olivaceus*, p. 227.

b^7. Ground-colour of chin and throat greyish brown .... *abyssinicus*, p. 228.

m^5. Belly orange-chestnut; flanks brown ..... *cabanisi*, p. 228.

g^4. Under tail-coverts nearly white.

n^5. Upper parts dusky slate-grey; sides of throat with nearly black streaks ..... *libonyanus*, p. 229.

o^5. Upper parts dull olive-brown; sides of throat with slightly obscure brown streaks.

e^6. Flanks buffish chestnut..... *pelios*, p. 230.

f^6. Flanks brown..... *chiguancoides*, p. 231.

1. Turdus maranonicus.

Turdus sp.?, *Taez. P. Z. S.* 1879, p. 221.
Turdus maranonicus, *Taez. P. Z. S.* 1880, p. 189, pl. xx.

General colour of the upper parts olive-brown, each feather having an obscure dark margin (which may be the remains of immaturity); median wing-coverts with pale tips of buffish brown (also a sign of immaturity); lores and ear-coverts showing pale centres. Ground-colour of the underparts pure white, slightly suffused with buff on the throat and under wing-coverts; axillaries, centre of belly, and under tail-coverts pure white, the remainder of the feathers of the underparts with dark-brown terminal spots, which are fan-shaped on the chin and throat and halfmoon-shaped on the breast and flanks; inner margin of quills buff. Bill dark brown. Wings with the fourth and fifth primaries nearly equal and longest, second primary intermediate in length between the seventh and eighth, bastard primary 1·1 to 1·0 inch. Legs, feet, and claws brown. Length of wing 4·55 to 4·5 inches, tail 3·75 to 3·62, culmen 0·9 to 0·88, tarsus 1·2.

It is not known that any difference of plumage is attributable to *sex or season*. The bird described above is probably a male of the year. *Young in first plumage* are slightly more rufous in the colour of the upper parts, and each feather has a buff shaft-line and a dark-brown margin; the wing-coverts have fan-shaped terminal buff spots.

The Peruvian Thrush has only been obtained in the valley of the Marañon, in Northern Peru, where it is supposed to be a resident.

The British Museum does not possess an example of this species. The only skins known to exist are in the Warsaw Museum, from which the above descriptions are taken.

2. Turdus bewsheri.

Turdus bewsheri, *E. Newton, P. Z. S.* 1877, p. 299, pl. xxxiv.; *Shelley, P. Z. S.* 1879, p. 677.

In the *adult male in spring plumage* the general colour of the upper parts is chocolate-brown, somewhat darker on the head and the inner webs of the quills and tail-feathers; lores brown; ear-coverts brown, with pale shafts; traces of a pale buffish eye-stripe above the lores. Breast and flanks brown, shading into nearly white on the chin, throat, and centre of belly; on the throat are a few indistinct brown streaks; and many of the feathers on the lower breast and flanks have white centres; under tail-coverts brown, with white or buff centres running out to the tips; axillaries brown, margined with white on the outside webs; under wing-coverts chestnut; inner margin of quills scarcely paler than the rest of the under surface. Bill dark brown above, somewhat paler below. Wings with the fifth primary slightly the longest, second primary about equal to the eighth, bastard primary 1·2 inch. Legs, feet, and claws brown. Length of wing 4·3 to 4·05 inches, tail 3·16 to 3·12, culmen 0·95 to 0·92, tarsus 1·6 to 1·52.

The *female* scarcely differs from the male. *Birds of the year* and *young in first plumage* are unknown.

The Anjuan Thrush has only been obtained on the island of Johanna, one of the Comoro group lying between Madagascar and Zanzibar. It is not supposed to be migratory.

The British Museum does not possess an example of this species; but skins are in the collections of Professor Newton, Capt. Shelley, the Bremen Museum, and my own collection.

3. Turdus olivaceofuscus.

Turdus olivaceofuscus, *Hartl. Abth. Geb. Nat. Hamb.* ii. pt. 2, p. 49, pl. iii. (1852); *Hartl. Journ. Orn.* 1854, p. 23; *Müller, Journ. Orn.* 1855, p. 389; *Hartl. Orn. W.-Afr.* p. 75 (1857).

General colour of the upper parts, including the ear-coverts, an almost uniform olive-brown, slightly darker and more russet on the head and lores. The underparts are pale olive-brown, the feathers of the chin and upper throat having brown terminal fan-shaped streaks, and each feather on the rest of the underparts having a terminal brown bar and a subterminal pale greyish-white band; the brown terminal bars become almost confluent on the breast and flanks; axillaries and under wing-coverts dull orange-chestnut; inner margin of quills pale orange-brown. Bill dark brown, paler at the base of the under mandible. Wings with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fourth and fifth, bastard primary 0·9 inch. Legs, feet, and claws brown. Length of wing 4·95 inches, tail 3·75, culmen 1·18, tarsus 1·55.

Nothing is known of the differences which may be caused by age, sex, or season.

The St.-Thomas Thrush is only known from the island in the Gulf of Guinea whose name it bears, and where it is supposed to be a resident.

The British Museum does not possess an example of this species. The above description is taken from the type in the Hamburg Museum.

4. Turdus iliacus.

Le Mauvis, *Briss. Orn.* ii. p. 208 (1760); *Montb. Hist. Nat. Ois.* iii. p. 309 (1775); *Daubent. Pl. Enl.* no. 51 (1775).

Turdus iliacus, *Linn. Syst. Nat.* i. p. 292 (1766); *Scop. Ann.* i. p. 134 (1769); *Lath. Gen. Syn. Suppl.* i. p. 285 (1787); *Gmel. Syst. Nat.* i. p. 808 (1788); *Lath. Ind. Orn.* i. p. 329 (1790); *Bechst. Naturg. Deutschl.* iv. p. 209 (1795); *id. Orn. Taschenb.* i. p. 146 (1802); *Wolf, Taschenb.* i. p. 196 (1810); *Temm. Man. d'Orn.* p. 89 (1815); *Koch, Syst. baier. Zool.* i. p. 175 (1816); *Temm. Man. d'Orn.* i. p. 165 (1820); *Naum. Vög. Deutschl.* ii. p. 276 (1822); *Brehm, Vög. Deutschl.* p. 385 (1831); *Ménétr. Cat. Rais. Cauc.* p. 29 (1832); *Gould, B. Eur.* ii. pl. 78 (1837); *Keys. u. Blas. Wirb. Eur.* pp. l, 176 (1840); *Nordm. Démid. Voy. Russ. mérid.* iii. p. 126 (1840); *Werner, Atlas, Insectiv.* pl. 14 (1842); *Gray, Gen. B.* i. p. 218 (1847); *Bp. Consp.* i. p. 270 (1850); *Cab. Mus. Hein.*

i. p. 2 (1850); *Middend. Reis. Sibir. Zool.* ii. pt. 2, p. 169 (1853); *Licht. Nomencl. Av.* p. 25 (1854); *Schl. Vog. Nederl.* p. 212 (1854); *Sundev. Sv. Fogl.* p. 51 (1856); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 211 (1859); *Linderm. Vög. Griechenl.* p. 84 (1860); *Newt. List B. Eur. Blasius*, p. 9 (1862); *Jerdon, B. Ind.* i. p. 532 (1862); *Newton, Baring-Gould's Iceland*, p. 408 (1863); *Radde, Reis. Sibir. Vög.* p. 234 (1863); *Gould, B. Gt. Brit.* ii. pl. xxxiv. (1864); *Degl. et Gerbe, Orn. Eur.* i. p. 421 (1867); *Loche, Expl. Sci. Algér., Ois.* p. 189 (1867); *Doderl. Avif. Sicil.* p. 109 (1869); *Droste, Vogelw. Borkum*, p. 93 (1869); *Gray, Hand-l. B.* i. p. 254. no. 3678 (1869); *Fritsch, Vög. Eur.* p. 142 (1870); *Salvad. Faun. Ital. Ucc.* p. 82 (1871); *Newt. ed. Yarr. Br. B.* i. p. 268 (1872); *Sharpe & Dresser, B. Eur.* pt. xiii. (1872); *Harting, Handb. Br. B.* p. 11 (1872); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Irby, B. Gibr.* p. 74 (1875); *Dresser, Ibis*, 1875, p. 335; *Blanf. East. Pers.* ii. p. 157 (1876); *Tacz. Bull. Soc. Zool. France*, i. p. 148 (1876); *Bogd. B. Cauc.* p. 79 (1879).

Turdus mauvis, *Müll. Syst. Nat. Suppl.* p. 141 (1776).
Redwing, *Lath. Gen. Syn.* ii. pt. 1, p. 22 (1783).
Turdus illas, *Pallas, Zoogr. Rosso-Asiat.* i. p. 456 (1811).
Sylvia iliaca (*Linn.*), *Savi, Orn. Tosc.* i. p. 215 (1827).
Turdus betularum, *Brehm, Vög. Deutschl.* p. 386 (1831).
Turdus vinetorum, *Brehm, loc. cit.* (1831).
Merula iliaca (*Linn.*), *Selby, Brit. Orn.* i. p. 165 (1833).
Turdus gracilis, *Brehm, Naum.* 1855, p. 281.
Iliacus illas (*Pall.*), *Des Murs, Traité d'Ool.* p. 293 (1860).
Iliacus minor, *Des Murs, loc. cit.* (1860).

In the *adult male in autumn plumage* the general colour of the upper parts is olive-brown, darker and slightly suffused with russet on the forehead and crown; lores nearly black; ear-coverts darkish olive-brown, each feather slightly paler in the centre; eye-stripe buffish white, very conspicuous, and extending to the nape; wings and wing-coverts brown, the outside web of each feather more or less broadly margined with olive-brown; greater wing-coverts obscurely margined with chestnut-brown, and with ill-defined pale tips; tail olive-brown, the outside feathers with obscure pale margins to the inner webs. General colour of the underparts very pale buff, shading into white (or white slightly suffused with chestnut) on the belly and into rich chestnut on the flanks; the chin, the centre of the lower throat, and the centre of the belly are unspotted; the cheeks, the upper part of the upper breast, and the lower part of the lower throat and the upper flanks have clearly-defined, very dark brown, fan-shaped terminal spots on each feather, which are paler and obscurely defined on the feathers of the breast and lower flanks; under tail-coverts white, the basal half of each feather margined with brown; axillaries and under wing-coverts rich chestnut. Bill dark brown, shading into brownish yellow on the basal half of the under mandible. Wing with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fourth and fifth, bastard primary 0·56 to 0·35 inch. Legs, feet, and claws yellowish brown. Length of wing 4·85 to 4·45 inches, tail 3·5 to 3·0, culmen 0·86 to 0·78, tarsus 1·25 to 1·15.

In *spring* the slight chestnut shade on the greater wing-coverts

has faded away, and the paler tips have been cast or abraded, the spots on the breast have attained more definition, from the same cause, and the general colour of the underparts has become purer white. *Birds of the year* have the pale tips to the greater wing-coverts more pronounced, and clearly-defined white tips to the innermost secondaries. *Young in first plumage* have also pale shaft-lines and dark-brown terminal bars to the feathers of the back and scapulars, all the wing-coverts have pale tips, and the spots on the underparts are larger and extend further onto the belly.

The Redwing, or Red-winged Thrush, breeds in the birch region and in the upper zone of the pine region from the Atlantic to the Pacific, though it appears to become very rare east of the valley of the Yenesay, where it is found as far north as lat. 71°, beyond the limit of forest-growth. It has occurred in Greenland, but winters in the British Isles and Western and Southern Europe, occasionally crossing the Mediterranean into Algeria, and wintering also in small numbers in Persia, Turkestan, and North-west India.

a. Ad. sk.	Devonshire.	Col. Montagu [P.].
b. Albino sk.	Devonshire.	Col. Montagu [P.].
c, d. Ad. sk.	Avington, Hampshire, November 1872.	E. Shelley, Esq. [P.].
e, f. Imm. sk.	Avington, Hampshire, November 1873.	R. B. Sharpe, Esq. [P.].
g. ♂ ad. sk.	Cookham, Berks, Feb. 28, 1874.	R. B. Sharpe, Esq. [P.].
h. Ad. st.	Cookham, Berks.	Mr. W. Briggs [P.].
i. ♀ ad. sk.	Surrey, January 1857.	F. Godman and O. Salvin, Esqrs. [P.].
k. Imm. sk.	Iffley, Oxford, Oct. 31, 1877.	J. Mallam, Esq. [P.].
l, m. Ad.; *n*. Imm. st.	Cambridgeshire.	Mr. J. Baker [C.].
o. Ad. st.	Leyden, Holland.	R. B. Sharpe, Esq. [P.].
p. ♂ ad. sk.	Heligoland, October 1878 (*L. Gätke*).	H. Seebohm, Esq. [P.].
q. ♀ ad. sk.	Tunor, S. Norway, June 27, 1866 (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
r. ♂ imm. sk.	S. Sweden, Oct. 26, 1873.	J. Meves, Esq. [C.].
s. ♀ ad. sk.	Skåne, April 3, 1874 (*J. Meves*).	R. B. Sharpe, Esq. [P.].
t. Ad. sk.	Archangel (*Craemers*).	H. Seebohm, Esq. [P.].
u. ♂ ad. sk.	Yenesay (lat. 66½°), June 19, 1877.	H. Seebohm, Esq. [P.].
v, w. Sternum.		Purchased.
x. Skeleton.		Purchased.

5. Turdus musicus.

La petite Grive, *Briss. Orn.* ii. p. 205 (1760).
La Grive, *Montb. Hist. Nat. Ois.* iii. p. 280 (1775).
La Litorne, *Daubent. Pl. Enl.* no. 406 (1775).
La Calandrotte, *Daubent. Pl. Enl.* no. 490 (1775).
Turdus musicus, *Linn. Syst. Nat.* i. p. 292 (1766); *Scop. Ann.* i. p. 133 (1769); *Lath. Gen. Syn. Suppl.* i. p. 285 (1787); *Gmel. Syst. Nat.* i. p. 809 (1788); *Lath. Ind. Orn.* i. p. 327 (1790); *Bechst. Naturg. Deutschl.* iv. p. 201 (1795); *id. Orn. Taschenb.*

i. p. 144 (1802); *Wolf, Taschenb.* i. p. 195 (1810); *Pallas, Zoogr. Rosso-Asiat.* i. p. 454 (1811); *Temm. Man. d'Orn.* p. 88 (1815); *Koch, Syst. baier. Zool.* i. p. 175 (1816); *Temm. Man. d'Orn.* i. p. 164 (1820); *Naum. Vög. Deutschl.* ii. p. 262 (1822); *Gould, B. Eur.* ii. pl. 78 (1837); *Keys. u. Blas. Wirb. Eur.* pp. I, 177 (1840); *Nord. Démid. Voy. Russ. mérid.* iii. p. 125 (1840); *Werner, Atlas, Insectiv.* pl. 13 (1842); *Degl. Orn. Eur.* i. p. 465 (1849); *Gray, Gen. B.* i. p. 218 (1847); *Bp. Consp.* i. p. 270 (1850); *Cab. Mus. Hein.* i. p. 2 (1850); *Middend. Reis. Sibir. Zool.* ii. pt. 2, p. 169 (1853); *Licht. Nomencl. Av.* p. 25 (1854); *Schl. Vog. Nederl.* p. 211 (1854); *Sundev. Sv. Fogl.* p. 50 (1856); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 205 (1859); *Linderm. Vög. Griechenl.* p. 85 (1860); *Newt. List B. Eur. Blasius*, p. 9 (1862); *Radde, Reis. Sibir. Vög.* p. 234 (1863); *Gould, B. Gt. Brit.* ii. pl. xxxii. (1866); *Degl. et Gerbe, Orn. Eur.* i. p. 422 (1867); *Loche, Expl. Sci. Algér., Ois.* p. 186 (1867); *Gray, Hand-l. B.* i. p. 253. no. 3677 (1869); *Doderl. Avif. Sicil.* p. 107 (1869); *Droste, Vogelw. Borkum*, p. 93 (1869); *Heugl. Orn. N.O.-Afr.* p. 381 (1869); *Fritsch, Vög. Eur.* p. 139 (1870); *Salvad. Faun. Ital., Uce.* p. 79 (1871); *Sharpe & Dresser, B. Eur.* pt. v. (1871); *Newt. ed. Yarr. Br. B.* i. p. 264 (1872); *Harting, Handb. Br. B.* p. 11 (1872); *Shelley, B. Egypt*, p. 66 (1872); *Irby, B. Gibr.* p. 73 (1875); *Blanf. East. Pers.* ii. p. 156 (1876); *Tacz. Bull Soc. Zool. France*, i. p. 148 (1876); *Bogd. B. Cauc.* p. 78 (1879).

Throstle, *Lath. Gen. Syn.* ii. pt. 1, p. 18 (1783).

Turdus iliacus, *Linn., apud Bodd. Table Pl. Enl.* p. 24 (1783).

Turdus pilaris, *Linn., apud Bodd. Table Pl. Enl.* p. 29 (1783).

Sylvia musica (*Linn.*), *Savi, Orn. Tosc.* i. p. 211 (1827).

Turdus minor, *Brehm, Vög. Deutschl.* p. 382 (1831).

Turdus philomelos, *Brehm, loc. cit.* (1831).

Merula musica (*Linn.*), *Selby, Brit. Orn.* i. p. 162 (1833); *Rüpp. Syst. Uebers.* p. 60 (1845).

Iliacus musicus (*Linn.*), *Des Murs, Traité d'Ool.* p. 292 (1860).

In the *adult male in autumn plumage* the general colour of the upper parts is olive-brown; lores buffish brown; ear-coverts buff, with black tips; eye-stripe buffish white, very indistinct, and soon losing itself behind the eye; wings brown, with pale ochraceous brown margins to the outer webs; median wing-coverts conspicuously tipped with rich buff, greater wing-coverts more obscurely so; primary wing-coverts with dark tips; tail brown. Chin buffish white; breast and flanks buffish yellow, shading into pure white on the centre of the belly; the feathers of the cheeks, throat, breast, and flanks with black fan-shaped terminal spots, which are generally entirely obsolete on the chin and centre of belly; under tail-coverts white, with the basal half of the margin brown; axillaries rich buff, greyer at the base; under wing-coverts rich buff; inner margin of quills pale brownish buff. Bill dark brown, yellowish at the base of the under mandible. Wings with the third and fourth primaries nearly equal and longest, second primary between the fourth and fifth, bastard primary 0·6 to 0·5 inch. Legs and feet yellowish brown, claws darker. Length of wing 4·55 to 4·25 inches, tail 3·3 to 2·7, culmen 0·88 to 0·8, tarsus 1·35 to 1·3.

The *female* is scarcely to be distinguished from the male. The abrasion which takes place during winter and spring causes the upper parts to be slightly greyer, much of the yellowish buff on the

breast and flanks disappears, and the spots on the underparts become smaller. *Birds of the year* are slightly more ochraceous than adults. The *young in first plumage* are yellower above and below, and most of the feathers of the upper parts have pale centres and nearly black tips.

The breeding-range of the Song-Thrush extends across the Palæarctic Region from the Atlantic as far as the valley of the Yanesay, being, however, much commoner in the west than in the east. In Norway it is found north of the Arctic Circle; but eastwards it has rarely been met with north of lat. 60°. In Southern Europe it breeds very sparingly, and only at high elevations. In many parts of England it is a resident bird or only a partial migrant; but it migrates in immense numbers to winter in South Europe and North Africa as far south as Nubia. The Siberian birds apparently winter in South Persia.

a. Ad. st.	England.	J. Gould, Esq. [P.].
b. Ad. sk.	Devonshire.	Col. Montagu [P.].
c. Ad. sk.	Avington, Hants, Nov. 25, 1872.	E. Shelley, Esq. [P.].
d, *e*. Juv. sk.	Avington, Hants, May 12, 1872.	R. B. Sharpe, Esq. [P.].
f. ♀ ad. sk.	Cookham, July 25, 1874.	R. B. Sharpe, Esq. [P.].
g. Ad. sk.	Cookham, Dec. 28, 1874.	R. B. Sharpe, Esq. [P.].
h. ♀ ad. sk.	Park Hatch, Godalming, Jan. 1857.	F. Godman and O. Salvin, Esqrs. [P.].
i, *k*. Ad. st.	Epping Forest.	Henry Doubleday, Esq. [P.].
l, *m*. Ad.; *n*, *o*. Juv. st.	Cambridgeshire.	Mr. J. Baker [C.].
p. Ad. sk.	Cambridgeshire.	J. Clark, Esq. [P.]. (Partial albino.)
q, *r*, *s*. Ad. sk.	Morocco (*Olcese*).	R. B. Sharpe, Esq. [P.].
t. Ad. sk.	Tunis, Feb. 1857 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.]. (Partial albino.)
u. ♀ ad. sk.	Oudena, Tunis, Feb. 18, 1857 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
v. ♂ ad. sk.	Acarnania, Greece, Dec. 13, 1868 (*Dr. Krüper*).	F. Godman and O. Salvin, Esqrs. [P.].
w. ♂ ad. sk.	Jordan valley.	Canon Tristram [C.].
x. ♀ ad. sk.	Forest of Bashan.	Canon Tristram [C.].
y. ♂ ad. sk.	Oak forest near Shiraz.	Col. St. John [C.].
z. ♀ ad. sk.	Reshdt, on Caspian Sea, Nov. 1869.	W. T. Blanford, Esq. [C.].
a'. ♂ ad. sk.	Scharkalskaja, Obb River, Sept. 17, 1876.	Dr. O. Finsch [C.].
b'. Sternum.		Purchased.
c'. ♀, *d'*. ♀, *e'*. Juv. skulls.	Würtemberg.	Dr. A. Günther.

6. Turdus auritus.

Turdus auritus, *Verr. N. Arch. Mus. Bull.* vi. p. 34 (1870); *id. op. cit.* vii. p. 31 (1871); *id. op. cit.* ix. pl. v. (1873); *Prjev. Rowley's Orn. Misc.* ii. p. 196 (1877); *David et Oust. Ois. Chine*, p. 157 (1877).

Turdus musicus, *Linn. apud Swinhoe, P. Z. S.* 1871, p. 306.

This Thrush is nearly allied to the preceding, but is perfectly distinct from it, differing both in size, colour, and wing-formula. The upper parts are of a richer olive-brown; the spots on the greater and median wing-coverts are much more conspicuous, the terminal spot being nearly pure white, and the subterminal band nearly black; the ear-coverts and the feathers of the cheeks have very conspicuous black terminal bands, which form a crescent on each side of the neck. The spots on the underparts are also larger, broader, and darker in colour; and the axillaries and under wing-coverts are of a darker buff. The most important difference is, however, to be found in the wing-formula, the third, fourth, and fifth primaries being nearly equal and longest, whilst the second primary is very little longer than the seventh. This species is slightly larger than the preceding. Length of wing 4·7 inches, tail 3·8, culmen 0·9, tarsus 1·37, bastard primary 0·9.

The *female* does not differ from the male. *Birds of the year* and *young in first plumage* appear to be unknown. *After the autumn moult* the general colour of the upper parts is slightly more ochraceous.

Père David's Thrush appears to be a resident in Northern and Western China.

The British Museum does not possess an example of this species; but I have examined specimens in the museums of Paris and St. Petersburg.

7. Turdus viscivorus.

La grosse Grive, *Briss. Orn.* ii. p. 200 (1760).

Turdus viscivorus, *Linn. Syst. Nat.* i. p. 291 (1766); *Scop. Ann.* i. p. 132 (1769); *Lath. Gen. Syn. Suppl.* i. p. 285 (1787); *Gmel. Syst. Nat.* i. p. 806 (1788); *Lath. Ind. Orn.* i. p. 326 (1790); *Bechst. Naturg. Deutschl.* iv. p. 181 (1795); *id. Orn. Taschenb.* i. p. 143 (1802); *Wolf, Taschenb.* i. p. 191 (1810); *Pallas, Zoogr. Rosso-Asiat.* i. p. 454 (1811); *Temm. Man. d'Orn.* p. 86 (1815); *Koch, Syst. baier. Zool.* i. p. 174 (1816); *Temm. Man. d'Orn.* i. p. 161 (1820); *Naum. Vög. Deutschl.* ii. p. 248 (1822); *Ménétr. Cat. Rais. Cauc.* p. 29 (1832); *Gould, B. Eur.* ii. pl. 77 (1837); *Keys. u. Blas. Wirb. Eur.* pp. li, 177 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 125 (1840); *Werner, Atlas, Insectiv.* pl. 11 (1842); *Gray, Gen. B.* i. p. 218 (1847); *Degl. Orn. Eur.* i. p. 467 (1849); *Blyth, Cat. B. Mus. As. Soc.* p. 100 (1849); *Bp. Consp.* i. p. 269 (1850); *Cab. Mus. Hein.* i. p. 2 (1850); *Licht. Nomencl. Av.* p. 25 (1854); *Schl. Vog. Nederl.* p. 208 (1854); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 194 (1854); *Sundev. Sv. Fogl.* p. 49 (1856); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 204 (1859); *Linderm. Vög. Griechenl.* p. 86 (1860); *Newt. List B. Eur. Blasius*, p. 9 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 418 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 183 (1867); *Gould, B. Gt. Br.* ii. pl. xxxiii. (1869); *Heugl. Orn. N.O.-Afr.* i. p. 379 (1869); *Gray, Hand-l. B.* i. p. 253. no. 3667 (1869); *Doderl. Avif. Sicil.* p. 106 (1869); *Droste, Vogelw. Borkum*, p. 93 (1869); *Fritsch, Vög. Eur.* p. 135 (1870); *Salvad. Faun. Ital. Ucc.* p. 78 (1871); *Sharpe & Dresser, B. Eur.* pt. vi. (1871); *Newton, ed. Yarr. Brit. B.* i. p. 258 (1872); *Harting, Handb. Br. B.* p. 11 (1872); *Shelley, B. Egypt*, p. 65 (1872);

Severtz. Turkest. Jevotn. p. 65 (1873); *Dresser, Ibis*, 1875, p. 334; *Irby, B. Gibr.* p. 73 (1875); *Blanford, East. Pers.* ii. p. 157 (1876); *Tacz. Bull. Soc. Zool. France*, i. p. 146 (1876); *Bogd. B. Cauc.* p. 78 (1879).

La Draine, *Montb. Hist. Nat. Ois.* iii. p. 295 (1775).

La Drenne, *Daubent. Pl. Enl.* no. 489 (1775).

Missel Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 16 (1783).

Sylvia viscivora (*Linn.*), *Savi, Orn. Tosc.* i. p. 208 (1827).

Ixocossyphus viscivorus (*Linn*), *Kaup, Natürl. Syst.* p. 145 (1829).

Turdus major, *Brehm, Vög. Deutschl.* p. 379 (1831).

Turdus arboreus, *Brehm, op. cit.* p. 380 (1831).

Merula viscivora (*Linn.*), *Selby, Brit. Orn.* i. p. 158 (1833); *Rüpp. Syst. Uebers.* p. 60 (1845).

Turdus hodgsoni, *Homeyer, Rhea*, ii. p. 150 (1849); *Bp. Consp.* i. p. 269 (1850); *Gray, Hand-l. B.* i. p. 253. no. 3068 (1869); *Hume, Nests and Eggs Ind. B.* p. 236 (1873).

Turdus bonapartei, *Cab. Journ. Orn.* 1860, p. 183.

In the *adult male in autumn plumage* the general colour of the upper parts is greyish brown, the feathers of the rump edged with ochraceous; lores and the feathers behind the eye greyish white; ear-coverts yellowish white, tipped with dark brown; no trace of eye-stripe; wings brown with pale edges, ochraceous on the outside edges of the secondaries; median wing-coverts with conspicuous greyish-white tips; greater wing-coverts and innermost secondaries with obscure pale tips; tail brown, the outside feathers very conspicuously tipped with white, especially on the inner webs; two or three other tail-feathers on each side less conspicuously tipped with nearly white. Underparts pale buff, darkest on the breast and flanks, each feather having a black terminal fan-shaped spot, except the under tail-coverts, which are margined with dark brown on the basal half; the spots are also almost obsolete on the chin and the centre of the belly; axillaries and under wing-coverts pure white; inner margins of quills nearly white. Bill dark brown, yellowish at the base of the under mandible. Wings with the third and fourth primaries nearly equal and slightly the longest, second primary equal to the fifth, bastard primary 1·05 to 0·7 inch. Legs and feet yellowish brown, claws darker brown. Tail with the outside feathers 0·35 inch shorter than the longest. Length of wing 6·55 to 5·4 inches, tail 4·75 to 3·9, culmen 1·1 to 0·88, tarsus 1·4 to 1·24.

The *female* is scarcely to be distinguished from the male, but is slightly paler above and below. The effects of the abrasions which take place during winter and spring are somewhat more conspicuous than usual in this species. The upper parts become greyer and paler; most of the buff and ochraceous tints on the rump, secondaries, and underparts fade away, and the spots on the underparts become smaller. *Birds of the year* are slightly more ochraceous than adults. The *young in first plumage* are yellower above and below, and most of the feathers of the upper parts have pale centres and black tips.

The Missel-Thrush breeds in Central Europe, extending on the west coast as far north as the Arctic Circle. Eastwards it ranges through Turkestan, the North-west Himalayas, and Lake Baical.

In England and some other mild climates it is resident; but by far the largest number migrate to Southern Europe and North Africa to winter. In South Europe a few occasionally remain to breed. The Siberian birds apparently winter in South Persia.

a. Ad. st.	England.	J. Gould, Esq.
b. Ad. sk.	Devonshire.	Col. Montagu [P.].
c. ♀ ad. sk.	Avington, Hants, May 12, 1877.	R. B. Sharpe, Esq. [P.].
d, *e*. ♂ juv. sk.	Avington, Hants, May 1876.	E. Shelley, Esq. [P.].
f, *g*. ♀ ad. sk.	Avington, Hants, Nov. 1873.	R. B. Sharpe, Esq. [P.].
h. Ad. sk.	Cookham, Dec. 28, 1874.	R. B. Sharpe, Esq. [P.].
i, *k*. ♂ ♀ ad. sk.	Park Hatch, Godalming, Feb. 1857 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
l. ♂ ad. sk.	Kingsbury, Middlesex, Jan. 1861.	J. E. Harting, Esq. [P.].
m, *n*. Ad.; *o*, *p*. Juv. sk.	Cambridgeshire.	Mr. J. Baker [C.].
q. ♀ ad. sk.	Ross-shire, May 11, 1874.	R. B. Sharpe, Esq. [P.].
r. Ad. st.	England.	Zoological Society. (Partial melanism.)
s. ♂ ad. sk.	Weregra, Tunis, March 29, 1857 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
t. Imm. sk.	Caspian, June 1841.	Purchased.
u. ♂ ad. sk.	Dschasil Kul, Ala Tau, Turkestan, 5000 feet.	Dr. O. Finsch [C.].
v, *w*. Juv., *x*. Ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
y. Ad. sk.	Near Almorah.	Capt. Stackhouse Pinwill [P.].
z, *a'*, *b'*. Ad. sk.	Kumaon (*Strachey*).	India Museum.
c'. Juv. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
d', *e'*, *f'*. Ad. sk.	Himalayas.	India Museum.
g'. Ad. st.	Himalayas (*Bax*).	India Museum.
h'. Skeleton.		Purchased.
i'. ♀ skull.	Würtemberg.	Dr. A. Günther.
k'. Sternum.		Purchased.

8. Turdus mustelinus.

Tawny Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 28 (1783, *ex Pennant*).
Turdus mustelinus, *Gmel. Syst. Nat.* i. p. 817 (1788, *ex Penn. et Lath.*); *Lath. Ind. Orn.* i. p. 331 (1790); *Vieill. Ois. Amér. sept.* ii. p. 6, pl. lxii. (1807); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 241 (1818); *Audub. Orn. Biogr.* i. p. 372 (1831); *Bp. Comp. List B. Eur. & N. Amer.* p. 17 (1838); *D'Orb., La Sagra's Cuba, Ois.* p. 49 (1838); *Gosse, B. Jamaica*, p. 144 (1847); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 270 (1850); *Cab. Mus. Hein.* i. p. 5 (1850); *Baird, Cass. & Lawr. B. N. Amer.* p. 212 (1858); *Sclater, P. Z. S.* 1859, p. 362; *id. Cat. Amer. B.* p. 2 (1862); *Baird, Review*, p. 13 (1864); *Gray, Hand-l. B.* i. p. 254. no. 3079 (1869); *Coues, Key N. Amer. B.* p. 72 (1872); *Baird, Brewer, & Ridgw. Hist. N. Amer. B.* i. p. 7 (1874); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 9 (1879).
Turdus melodes, *Bartr. Trav.* p. 290 *bis* (1791).

Turdus melodus (*Bartr.*), *Wilson, Amer. Orn.* i. p. 29, pl. ii. fig. 1 (1808).
Turdus melodius (*Bartr.*), *Bp. Journ. Phil. Acad.* iv. p. 33 (1824).
Merula mustelinus (*Gmel.*), *Denny, P. Z. S.* 1847, p. 38.
Turdus densus, *Bp. Compt. Rend.* xxxviii. p. 2 (1854).
Turdus (Hylocichla) mustelinus (*Gmel.*), *Coues, Birds Colorado Vall.* p. 28 (1878).

In the *adult male in spring plumage* the general colour of the upper parts is russet-brown, shading into orange-chestnut on the head and into olive on the rump and upper tail-coverts; lores grey; ear-coverts brown, with pale centres; no trace of eye-stripe; wings and wing-coverts brown, the outside webs of the feathers russet-brown; tail olive-brown, the tips of the feathers narrowly margined with white. Underparts white, with a slight shade of buff on the lower throat, each feather (except on the chin, centre of upper throat, centre of belly, and under tail-coverts) having a conspicuous very dark-brown fan-shaped terminal spot, paler and obscurely defined on the lower flanks; axillaries white, with brown centres; under wing-coverts white with brown bases; inner margins of quills pale brown. Bill reddish brown, paler at the base of the under mandible. Wings with the third and fourth primaries nearly equal and longest; second primary sometimes shorter, sometimes longer than the fifth; bastard primary 0·9 to 0·45 inch. Legs, feet, and claws pale brown. Length of wing 4·45 to 3·85 inches, tail 2·9 to 2·5, culmen 0·8 to 0·7, tarsus 1·28 to 1·12.

The *female* does not appear to differ from the male, nor are the colours much brighter immediately *after the autumn moult*. *Birds of the year* have traces of pale tips to the greater wing-coverts. *Young in first plumage* are described as having pale yellowish shaft-lines to the small feathers of the upper parts and pale ochraceous tips to the wing-coverts.

The Wood-Thrush breeds in the Northern and Central United States east of the Missouri, and winters in Cuba, Eastern Mexico, Guatemala, and Honduras.

a. Ad. st.	N. America.	Major-Gen. Hardwicke [P.].
b. Ad. st.	N. America.	J. Gould, Esq. [P.].
c. Ad. sk.	N. America.	Purchased.
d. Ad. sk.	Ann Arbor, Michigan.	Prof. J. B. Steere [P.].
e, *f*. Ad. sk.	Honduras.	Mr. Dyson [C.].
g. Ad. sk.	Pennsylvania (*J. Kuder*).	H. Seebohm, Esq. [P.].

Turdus auduboni, Turdus pallasi, and Turdus aonalaschkæ.

Some ornithologists make the above three forms specifically distinct, others unite them together as one species; whilst a third, and apparently increasing number, look upon them as subspecies or imperfectly segregated species, which probably occasionally interbreed. I propose to adopt the latter method of treatment, and to describe first the largest form, of which the synonymy is as follows:—

9. Turdus auduboni.

Merula silens (*Vieill.*), *apud Swainson, Phil. Mag.* 1827, p. 369, *apud Swainson, Faun. Bor.-Amer., Birds*, p. 186 (1831).

Turdus silens (*Vieill.*), *apud Gray, Gen. B.* i. p. 219 (1847); *apud Sclater, P. Z. S.* 1858, p. 300, *et P. Z. S.* 1859, p. 325, *et Ibis*, 1861, p. 282, *et Cat. Amer. B.* p. 2 (1862).

Turdus solitarius, *Wilson, apud Sclater, P. Z. S.* 1857, p. 212.

Turdus auduboni, *Baird, Review*, i. p. 16 (1864); *Gray, Hand-l. B.* i. p. 254. no. 3685 (1869); *Sumichrast, Mem. Bost. Soc. N. H.* i. p. 542 (1869); *Henshaw, Bull. Nutt. Orn. Club*, 1879, p. 135; *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 14 (1879).

Turdus pallasii, *Cab.*, var. audubonii, *Baird*; *Coues, Key N. Amer. B.* p. 72 (1872); *Baird, Brewer, & Ridgw. Hist. N. Amer. B.* i. p. 18 (1874).

Turdus pallasi, *Cab. apud Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873).

Turdus pallasi, *Cab.*, *c.* audubonii, *Baird*; *Coues, B. N. West*, p. 3 (1874).

Turdus (Hylocichla) pallasi, *Cab.*, *c.* auduboni, *Baird*; *Coues, B. Color. Vall.* p. 21 (1878).

In the *adult male in spring plumage* the general colour of the upper parts is olive-brown, shading into russet-brown on the upper tail-coverts; lores brown; ear-coverts brown, with pale centres; wing-coverts and innermost secondaries olive-brown, the primary wing-coverts margined on the outside webs with russet-brown; quills brown, margined on the outside webs with russet-brown; tail russet-brown. Underparts nearly white, suffused with buff on the breast, under tail-coverts, and under wing-coverts, and with brown on the axillaries and flanks; the feathers of the cheeks, sides of the neck, and upper breast with fan-shaped dark-brown terminal spots, and those of the lower breast and upper flanks with obscure paler brown fan-shaped terminal spots; inner margins of quills buff. Bill dark brown, paler at the base of the under mandible. Wings with the third, fourth, and fifth primaries nearly equal and longest; second primary slightly longer than the sixth; bastard primary 0·8 inch. Legs, feet, and claws pale brown. Length of wing 4·25 to 3·70 inches, tail 3·25 to 2·9, culmen 0·74 to 0·66, tarsus 1·16 to 1·13.

The *female* does not appear to differ from the male. *After the autumn moult* the olive-brown of the upper parts is very slightly suffused with russet, but not sufficiently so to admit of its being called russet-brown. *Birds of the year* have pale tips to many of the wing-coverts. *Young in first plumage* have pale shaft-lines and obscure dark terminal bars to most of the small feathers of the upper parts, and ochraceous tips to the wing-coverts.

The Mexican form of the Hermit Thrush is a resident in the pine regions of the southern Rocky-Mountains range from Great Salt Lake to Mexico, and has been obtained in winter in Guatemala and California.

a, Ad. sk. California. Purchased.

The synonymy of the Eastern form is as follows:—

10. Turdus pallasi.

Turdus pallasii, *Cab.**
Turdus solitarius, *Wilson, Amer. Orn.* v. p. 95, *nec* pl. xliii. fig. 2 (1812, *nec Müll., nec Gmel.*); *Bp. Comp. List B. Eur. & N. Amer.* p. 17 (1838); *Audub. B. Amer.* iii. p. 29, pl. cxlvi. (1841); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 270 (1850).
Turdus minor, *Gmel. apud Bp. Journ. Phil. Acad.* iv. p. 33 (1824), *apud Audub. Orn. Biogr.* i. p. 303, pl. lviii. (1831).
Merula solitaria (*Wilson*), *Sw. Faun. Bor.-Amer. Birds*, ii. p. 184, pl. xxxv. (1831).
Turdus nanus, *Audub. Orn. Biogr.* v. p. 201, pl. ccccxix. (1839); *id. B. Amer.* iii. p. 32, pl. cxlvii. (1841); *Gray, Gen. B.* i. p. 219 (1847).
Turdus guttatus (*Pall.*), *apud Cab. Tschudi's Faun. Per.* p. 187 (1846).
Turdus pallasii, *Cab. Arch. für Naturg.* 1847, p. 205; *Homeyer, Rhea*, ii. p. 147 (1849); *Cab. Mus. Hein.* i. p. 5 (1850); *Gundlach, Journ. Orn.* 1855, p. 470; *Baird, Review*, i. p. 14 (1864); *Gray, Hand-l. B.* i. p. 254. no. 3684 (1869); *Coues, Key N. Amer. B.* p. 72 (1872); *id. B. N. West*, p. 2 (1874); *Baird, Brewer, & Ridgw. Hist. N. Amer. B.* i. p. 18 (1874); *Henshaw, Bull. Nutt. Orn. Club*, p. 136 (1879); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 13 (1879).
Turdus (Hylocichla) pallasi (*Cab.*), *Coues, B. Col. Vall.* p. 20 (1878).

This form is said to differ from the preceding in having the general colour of the upper parts slightly more rufous, and in having a fulvous shade on the flanks; but the distinction is based upon differences of colour so slight as to be only perceptible to an educated eye. It is, on an average, a smaller form. Length of wing 3·85 to 3·30 inches, tail 2·8 to 2·4, culmen 0·7 to 0·62, tarsus 1·14 to 1·05.

The Eastern form of the Hermit Thrush is a migratory bird, breeding from Boston northwards to about lat. 60°, and extending westwards into the Rocky-Mountains range. It winters in the Eastern States from Boston to Florida and in Cuba.

a, b. Ad. sk.	Pennsylvania (*J. Kuder*).	H. Seebohm, Esq. [P.].
c. Ad. sk.	Libertyville, Illinois, May 1, 1877.	H. K. Coale, Esq. [P.].
d. Ad. sk.	California.	Purchased.
e. Ad. sk.	N. America.	Purchased.

* In consequence of Audubon having already described and figured this as *Turdus minor*, Gmel., his name of *Turdus nanus*, which was founded

* An small example of the same species, has been so extensively misapplied Gmelin Western form of the Hermit Thrush that it is no longer available for than half-an form, and must be rejected in favour of Cabanis's name, which is the states thunder of date.
species; bu
of *Turdus s*

The synonymy of the Western form is as follows:—

11. Turdus aonalaschkæ.

Aoonalashka Thrush, *Lath. Gen. Syn.* ii. p. 23 (1783).
Turdus aonalaschkae, *Gmel. Syst. Nat.* i. p. 808 (1788); *Lath. Ind. Orn.* i. p. 329 (1790); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 274 (1818).
Muscicapa guttata, *Pall. Zoogr. Rosso-Asiat.* i. p. 465 (1811).
Turdus nanus, *Audub., apud Baird, Cass. & Lawr. B. N. Amer.* p. 213 (1858); *apud Sclater, P. Z. S.* 1859, p. 325; *apud Sclater, Cat. Am. B.* p. 2 (1862); *apud Baird, Review*, p. 15 (1864); *apud Dall & Bann. Tr. Chic. Acad.* i. p. 275 (1869); *apud Gray, Hand-l. B.* i. p. 254. no. 3680 (1869); *apud Cooper, B. Calif., ed. Baird*, p. 4 (1870).
Hylocichla nana (*Aud.*), *apud Coues, Ibis*, 1865, p. 163.
Turdus (Hylocichla) nanus (*Aud.*), *apud Coues, Pr. Phil. Acad.* xviii. p. 65 (1866).
Turdus pallasii, *Cab.*, var. nanus, *Aud., apud Coues, Key N. Amer. B.* p. 72 (1872); *apud Baird, Brewer, & Ridgw. Hist. N. Amer. B.* p. 20 (1874).
Turdus pallasi, *Cab., b.* nanus, *Aud., apud Coues, B. N. West*, p. 3 (1874).
Turdus (Hylocichla) pallasi, *Cab., b.* nanus, *Aud., apud Coues, Birds Colorado Vall.* p. 21 (1878).

This form is said to resemble *T. audubuni* in colour. It appears to be always smaller than that species, and is, on an average, smaller than *T. pallasi*. Length of wing 3·67 to 3·25 inches, tail 3·0 to 2·4, culmen 0·66 to 0·6, tarsus 1·16 to 1·04.

The Western form of the Hermit Thrush breeds in South Alaska, and winters in California as far south as Cape St. Lucas, extending eastwards into the Rocky-Mountains range. Its southern breeding-limit and the extent of its northern winter range have not yet been accurately determined.

a. Ad. sk.	49th Parallel (*Dawson*).	Boundary Commission.
b. Ad. sk.	La Parada, Mexico.	A. Boucard, Esq. [C.].
c. Ad. sk.	California, Oct. 1851 (*Dr. Heerman*).	H. Seebohm, Esq. [P.].
d. Ad. sk.	California, Nov. 1850 (*Dr. Heerman*).	H. Seebohm, Esq. [P.].

Turdus swainsoni, Turdus aliciæ, and Turdus ustulatus.

Ornithologists differ in opinion as to the value of these three forms, which appear to me to be deserving only of subspecific rank, some examples being intermediate. The synonymy of the Eastern form is as follows:—

› pine
‹ Lake
nd Cali-

12. Turdus swainsoni.

Turdus swainsoni, *Cab.**
Brown Thrush, *Lath. Gen. Syn.* ii. p. 28 (1783).
Turdus fuscus, *Gmel. Syst. Nat.* i. p. 817 (1788); *Lath. Ind. Orn.* i. p. 332 (1790); *Turton, Linn. Gen. Syst. Nat.* i. p. 497 (1806).
Turdus solitarius, *Wilson, Amer. Orn.* v. p. 95, pl. xliii. fig. 2 (1812, *nec Müll., nec Gmel., nec Wilson*).
Merula wilsonii (*Bonap.*), *apud Sw. Faun. Bor.-Amer., Birds*, p. 182 (1831).
Merula olivacea, *Brewer, Pr. Bost. Soc. N. H.* i. p. 191 (1844, *nec Linn.*).
Turdus olivaceus (*Brew.*), *Giraud, B. L. Island*, p. 91 (1844, *nec Linn.*); *Martens, Journ. Orn.* 1859, p. 212 (*nec Linn.*).
Turdus swainsoni, *Cab. Tschudi's Faun. Per.* p. 188 (1846); *id. Mus. Hein.* i. p. 5 (1850); *Sclater, P. Z. S.* 1858, p. 451; *Baird, Cass., & Lawr. B. N. Amer.* p. 216 (1858); *Sclater, P. Z. S.* 1859, p. 326; *Gundlach, Journ. Orn.* 1861, p. 324; *Scl. Cat. Amer. B.* p. 2 (1862); *Baird, Review*, p. 19 (1864); *Pelzeln, Orn. Bras.* ii. p. 92 (1868); *Dall & Bann. Tr. Chic. Acad.* i. p. 275 (1869); *Gray, Hand-l. B.* i. p. 254. no. 3682 (1869); *Frantzius, Journ. Orn.* 1869, p. 289; *Coues, Key N. Amer. B.* p. 73 (1872); *Sclater & Salv. P. Z. S.* 1873, p. 255; *iid. Nomencl. Av. Neotr.* p. 1 (1873); *Baird, Brewer, & Ridgw. Hist. N. Amer. B.* p. 14 (1874); *Tacz. P. Z. S.* 1874, p. 503; *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 10 (1879).
Turdus minimus, *Lafresn. Rev. Zool.* 1848, p. 5; *Sclater, P. Z. S.* 1854, p. 111.
Turdus (Hylocichla) swainsoni (*Cab.*), *Coues, Birds Colorado Vall.* p. 34 (1878).

In the *adult male in spring plumage* the general colour of the upper parts is almost uniform olive-brown; lores brown; traces of a buff eye-stripe above the lores and extending round the eye; ear-coverts brown, with pale buff centres. Underparts nearly white, shading into brown on the flanks, and suffused with buff on the chin, cheeks, and throat; the feathers of the cheeks, lower throat, breast, and upper flanks with brown terminal fan-shaped spots; axillaries and under wing-coverts buff, more or less suffused with brown; inner margin of quills pale buffish brown. Bill dark brown, paler at the base of the under mandible. Wings with the third primary slightly the longest, second primary slightly shorter than the fourth, but considerably longer than the fifth, bastard primary 0·6 to 0·45 inch. Legs, feet, and claws pale brown. Length of wing 4·1 to 3·6 inches, tail 2·88 to 2·45, culmen 0·65 to 0·56, tarsus 1·13 to 1·05.

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* According to the rules of the British Association, the name given by Gmelin to this species should be adopted instead of that given by Cabanis more than half a century later. Coues, in his 'Birds of the Colorado Valley' (p. 34), states that the name given by Gmelin had been previously applied to another species; but I have been unable to discover any such application. The name of *Turdus swainsoni*, having been most generally used, I prefer to retain it.

The *female* does not appear to differ from the male. *After the autumn moult* the olive-brown of the upper parts and the buff of the cheeks, ear-coverts, and throat is slightly richer and darker in colour. *Birds of the year* have traces of pale tips to the greater wing-coverts. *Young in first plumage* are described as very similar to those of the nearly allied species.

The Buff-breasted form of the Olive-backed Thrush breeds in the whole of Canada as far north as the Arctic Circle, extends westwards into Eastern Alaska and southwards down the Rocky-Mountain chain as far as the Great Salt Lake. It winters in Cuba, Costa Rica, Panama, Colombia, Ecuador, Peru, and Bolivia. It is said occasionally to pass west of the Rocky Mountains, through California to Mexico and Guatemala.

a. Ad. sk.	Pennsylvania (*J. Kuder*).	H. Seebohm, Esq. [P.].
b, *c*, *d*. ♀ ad. sk.	Fort Simpson.	B. R. Ross, Esq. [C.].
e. ♀ ad. sk.	West side of Rocky Mountains.	J. K. Lord, Esq. [P.].
f. Ad. sk.	Bogotá, New Granada.	H. Seebohm, Esq. [P.].
g. Ad. sk.	Bolivia.	Mr. Bridges [C.].

The synonymy of the Grey-cheeked form is as follows:—

13. Turdus aliciæ.

Turdus aliciæ, *Baird, Cass., & Lawr. B. N. Amer.* p. 217, pl. 81. fig. 2 (1858); *Sclater, P. Z. S.* 1859, p. 326; *Baird, Review*, i. p. 21 (1864); *Dall & Bann. Tr. Chic. Acad.* i. p. 275 (1869); *Gray, Hand-l. B.* i. p. 254. no. 3686 (1869); *Frantzius, Journ. Orn.* 1869, p. 289; *Baird, Brewer, & Ridgw. Hist. N. Amer. B.* i. p. 11 (1874); *Tacz. Bull. Soc. Zool. France*, 1876, p. 148; *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 12 (1879).

Turdus swainsonii, *Cab.*, var. aliciæ (*Baird*), *Coues, Key N. Amer. B.* p. 73 (1872).

Turdus swainsoni, *Cab.*, *apud Cordeaux, Ibis*, 1875, p. 177, *apud Seebohm, Ibis*, 1877, p. 164, *apud Dalgleish, Bull. Nutt. Orn. Club*, 1880, p. 68.

Turdus (Hylocichla) swainsoni, *Cab.*, *b*. aliciæ (*Baird*), *Coues, Birds Colorado Vall.* p. 35 (1878).

This form differs from the preceding only in having no buff on the eye-stripe, round the eye, chin, cheeks, or ear-coverts, and very little on the throat and upper breast. It is on an average a somewhat larger bird. Length of wing 4·25 to 3·9 inches, tail 3·0 to 2·75, culmen 0·7 to 0·6, tarsus 1·3 to 1·1.

The grey-cheeked form of the Olive-backed Thrush breeds in Arctic America from the Atlantic to the Pacific, crossing over Behring's Straits into Siberia north of Kamtschatka. It has been obtained in winter in Cuba, Costa Rica, and Panama, and as far south as Amazonia.

a. Ad. sk.	Repulse Bay.	Dr. Rae [P.].
b. ♀ ad. sk	Wisconsin, Sept. 28, 1875.	Dr. Brewer [P.].
c. ♂ ad. sk.	Chamicuros (E. Peru), March 20, 1868.	E. Bartlett, Esq. [C.].

The synonymy of the Western form is as follows:—

14. Turdus ustulatus.

Turdus ustulatus, *Nuttall, Man. Orn.* i. p. 400 (1840); *Baird, Cass., & Lawr. B. N. Amer.* p. 215, pl. lxxxi. fig. 1 (1858); *Baird, Review*, p. 18 (1864); *Dall & Bann. Tr. Chic. Acad.* i. p. 275 (1869); *Gray, Hand-l. B.* i. p. 254. no. 3683 (1869); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 10 (1879).

Turdus swainsoni, *Cab.*, var. ustulatus (*Nutt.*), *Coues, Key N. Amer. B.* p. 73 (1872); *Baird, Brewer, & Ridgw. Hist. N. Amer. B.* i. p. 16 (1874).

Turdus (Hylocichla) swainsoni, *Cab.*, c. ustulatus (*Nutt.*), *Coues, Birds Colorado Vall.* p. 35 (1878).

This form is scarcely distinguishable from *T. swainsoni*, from which it is said only to differ in being slightly more rufescent on the upper parts. Length of wing 4·1 to 3·7 inches, tail 3·15 to 2·6, culmen 0·66 to 0·58, tarsus 1·22 to 1·05.

The Western form of the Olive-backed Thrush breeds on the Pacific slopes of the Rocky Mountains from Alaska to California, and winters in the Tres-Marias Islands off the coast of Mexico and in Guatemala.

a. ♂ ad. sk.	Fodalgo Bay.	Dr. Lyall [P.].
b, *c*. Ad. st.	North America.	

15. Turdus fuscescens.

Turdus fuscescens, *Stephens* *.

Le Mauvis de la Caroline, *Briss. Orn.* ii. p. 212 (1760).

La Grivette d'Amérique, *Montb. Hist. Nat. Ois.* iii. p. 289 (1775).

Little Thrush, *Lath. Gen. Syn.* ii. p. 20 (1783).

Turdus minor, *Gmel. Syst. Nat.* i. p. 809 (1788); *Lath. Ind. Orn.* i. p. 328 (1790); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 232 (1818); *Bp. Comp. List B. Eur. & N. Amer.* p. 17 (1838); *d'Orbigny, La Sagra's Cuba, Ois.* p. 47, pl. v. (1840).

Turdus mustelinus, *Gmel., apud Wilson, Amer. Orn.* v. p. 98, pl. xliii. (1812).

Turdus fuscescens, *Stephens, Shaw's Gen. Zool.* x. p. 182 (1817); *Gray, Gen. B.* i. p. 219 (1847); *Baird, Cass., & Lawr. B. N. Amer.* p. 214 (1858); *Sclater, P. Z. S.* 1859, p. 326; *id. Cat. Amer. B.* p. 2 (1862); *Baird, Review*, p. 17 (1864); *Pelzeln, Orn. Bras.* ii. p. 92 (1868); *Gray, Hand-l. B.* i. p. 254. no. 3681 (1869); *Coues, Key N. Amer. B.* p. 73 (1872); *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Coues, B. N. West*, p. 5 (1874); *Baird, Brewer, & Ridgw. Hist. N. Amer. B.* i. p. 9 (1874); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 10 (1879).

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* There can be no doubt that the name given by Stephens to this species has been used by the greatest number of ornithologists, and I therefore adopt it in preference to the older name given by Gmelin. Those writers who wish to harmonize this decision with the rules of the British Association must assume that Gmelin's diagnosis does not "clearly define" the species and that Stephens's does.

Turdus silens, *Vieill. Encycl. Méth.* ii. p. 647 (1823).
Turdus wilsoni, *Bp. Journ. Phil. Ac.* iv. p. 34 (1824); *Audub. Orn. Biogr.* ii. p. 362, pl. clxiv. (1834); *Bp. Comp. List B. Eur. & N. Amer.* p. 17 (1838); *Audub. B. Amer.* iii. p. 27, pl. cxlv. (1841); *Bp. Consp.* i. p. 271 (1850).
Merula minor (*Gmel.*), *Sw. Faun. Bor.-Amer. Birds*, p. 179, pl. xxxvi. (1831).
Merula wilsonii (*Bonap.*), *Brewer, P. Bost. Soc. N. H.* i. p. 191. (1844)
Turdus brunneus, *Brewer, Journ. Bost. Soc.* vi. p. 304 (1852).
Turdus (Hylocichla) fuscescens (*Steph.*), *Coues, Birds Colorado Vall.* p. 39 (1878).

In the *adult male in spring plumage* the general colour of the upper parts is russet-brown, greyer on the inner webs of the quills; lores grey; ear-coverts brown, with pale centres; no trace of eye-stripe; cheeks, lower throat, and breast pale buff, each feather having a brown, somewhat obscurely defined fan-shaped terminal spot; rest of underparts white, shading into brown on the flanks, and occasionally showing traces of pale brown or buff in other parts; axillaries white, with pale-brown centres; under wing-coverts white, with pale-brown bases; inner margin of quills pale brown, shading into white on the entire basal portion of the inner webs of the quills. Bill dark brown, pale at the base of the under mandible. Wings with the third primary slightly the longest, second primary intermediate in length between the fourth and fifth, bastard primary 0·65 to 0·45 inch. Legs, feet, and claws pale brown. Length of wing 4·1 to 3·8 inches, tail 3·0 to 2·7, culmen 0·71 to 0·62, tarsus 1·22 to 1·15.

The *female* does not differ from the male. No important change is produced by the *autumn moult*. *Birds of the year* have traces of pale tips to some of the wing-coverts. *Young in first plumage* appear to be undescribed.

Wilson's Thrush breeds in South Canada and in the Northern and Central United States from the Rocky Mountains to the Atlantic. A few winter in the Gulf States; but the majority migrate further south, where they have been obtained in Cuba, Panama, and South America north of the Amazon.

a. Ad. sk.	Pennsylvania (*J. Kuder*).	H. Seebohm, Esq. [P.].
b, *c*, *d*. Ad. sk.	Ann Arbor, Michigan.	Prof. J. B. Steere [P.].
e. Ad. sk.	49th Parallel (*Dawson*).	Boundary Commission.

16. Turdus dryas.

Malacocichla dryas, *Gould, P. Z. S.* 1854, p. 285, pl. lxxv.; *Sclat. & Salv. Ibis*, 1859, p. 7.
Malacocichla maculata, *Scl. P. Z. S.* 1858, p. 64.
Catharus dryas (*Gould*), *Sclater, P. Z. S.* 1859, p. 324; *Baird, Review*, i. p. 10 (1864); *Salvin, P. Z. S.* 1866, p. 60; *Sclat. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 7 (1879).
Catharus maculatus (*Sclater*), *Sclat. P. Z. S.* 1859, p. 324; *id.*

Cat. Am. B. p. 1 (1862); *Sclat. & Salv. Nomencl. Av. Neotr.* p. 1 (1873).

Turdus dryas (*Gould*), *Gray, Hand-l. B.* i. p. 259. no. 3781 (1869).

In the *adult male in autumn plumage* the head, nape, lores, ear-coverts, and cheeks are black; general colour of the remainder of the upper parts dark brown, suffused on the margin of the outside webs of the quills and tail-feathers, and on the entire margin of the remaining feathers, especially at the nape, with olive-green. Underparts pale brilliant orange-yellow, most brilliant on the upper throat, shading into olive-green on the flanks, and into greyish brown on the axillaries and under wing-coverts, and spotted with olive-green on the lower throat and breast; inner margin of quills pale brown. Bill yellow. Wings with the fourth and fifth primaries nearly equal and longest, second primary intermediate in length between the seventh and eighth, bastard primary 1 inch to 0·9, not much more than a third the length of the second primary. Legs, feet, and claws pale yellow. Length of wing 4·0 to 3·4 inches, tail 3·05 to 2·65, culmen 0·72 to 0·65, tarsus 1·4 to 1·35.

It is not known that the *female* differs from the male. In *spring* the olive-green of the upper parts and the brilliant yellow of the underparts appear to fade, and the dark of the upper parts and the spots on the underparts to intensify. Some of this difference may be due to individual variation and some to local race. Guatemalan birds are largest, and appear to be on an average the more brilliantly coloured; whilst a skin from Bolivia in Salvin and Godman's collection is the smallest, and has the black of the head replaced by dark brown. This may prove to be a *bird of the year*, a plumage of which, as well as of the *young in first plumage*, we have no information. It is highly probable that a larger series of skins may prove that this species must be subdivided into three subspecies—a large richly coloured form from Guatemala; a smaller form, in which the underparts never have the rich yellow of the Guatemalan form, from Colombia and Ecuador; and a still smaller form, in which the head is brown instead of black, from Bolivia.

Gould's Central-American Thrush frequents the forests of Guatemala, Colombia, Ecuador, and Bolivia, where it is said to be a resident.

a. Ad. sk.	Guatemala.	John Gould, Esq. (Type of *Malacocichla dryas*, Gould.)

17. Turdus pilaris.

La Litorne, ou Tourdelle, *Briss. Orn.* ii. p. 214 (1760).

Turdus pilaris, *Linn. Syst. Nat.* i. p. 291 (1766); *Scop. Ann.* i. p. 133 (1769); *Lath. Gen. Syn. Suppl.* i. p. 287 (1787); *Gmel. Syst. Nat.* i. p. 807 (1788); *Lath. Ind. Orn.* i. p. 330 (1790); *Bechst. Naturg. Deutschl.* iv. p. 190 (1795); *Bechst. Orn. Taschenb.* i. p. 145 (1802); *Wolf, Taschenb.* i. p. 193 (1810); *Pallas, Zoogr. Rosso-Asiat.* i. p. 455 (1811); *Temm. Man. d'Orn.* p. 87 (1815); *Koch, Syst. baier. Zool.* i. p. 173 (1816); *Temm. Man. d'Orn.* i. p. 163 (1820); *Naum. Vög. Deutschl.* ii. p. 296 (1822); *Brehm,*

Vög. Deutschl. p. 383 (1831); *Gould, B. Eur.* ii. pl. 76 (1837); *Keys. u. Blas. Wirb. Eur.* pp. li, 177 (1840); *Nordm. Demid. Voy. Russ. mérid.* iii. p. 127 (1840); *Werner, Atlas, Insectiv.* pl. 12 (1842); *Gray, Gen. B.* i. p. 218 (1847); *Degl. Orn. Eur.* i. p. 471 (1849); *Bp. Consp.* i. p. 269 (1850); *Cab. Mus. Hein.* i. p. 2 (1850); *Licht. Nomencl. Av.* p. 25 (1854); *Horsf. & Moore, Cat. B. Mus. E.I.Co.* i. p. 194 (1854); *Schl. Vog. Nederl.* p. 209 (1854); *Sundev. Sv. Fogl.* p. 48 (1856); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 212 (1859); *Linderm. Vög. Griechenl.* p. 85 (1860); *Newt. List B. Eur. Blasius*, p. 9 (1862); *Gould, B. Gt. Br.* ii. pl. xxxv. (1864); *Degl. et Gerbe, Orn. Eur.* i. p. 407 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 185 (1867); *Gray, Hand-l. B.* i. p. 253. no. 3673 (1869); *Doderl. Avif. Sicil.* p. 107 (1869); *Droste, Vogelw. Borkum*, p. 93 (1869); *Heugl. Orn. N.O.-Afr.* p. 379 (1869); *Fritsch, Vög. Eur.* p. 136 (1870); *Sharpe & Dresser, B. Eur.* pt. ix. (1871); *Newt. ed. Yarr. Br. B.* i. p. 272 (1872); *Harting, Handb. Br. B.* p. 11 (1872); *Shelley, B. Egypt*, p. 65 (1872); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Irby, B. Gibr.* p. 73 (1875); *Dresser, Ibis*, 1875, p. 335; *Tacz. Bull. Soc. Zool. France*, p. 147 (1876); *Seebohm, Ibis*, 1879, p. 2; *Boyd. B. Cauc.* p. 80 (1879).

La Litorne, *Montb. Hist. Nat. Ois.* iii. p. 301 (1775).
Alauda calandrotte, *Müll. Syst. Nat. Suppl.* p. 137 (1776).
Fieldfare, *Lath. Gen. Syn.* ii. pt. 1, p. 24 (1783).
Sylvia pilaris (*Linn.*), *Savi, Orn. Tosc.* i. p. 209 (1827).
Arceuthornis pilaris (*Linn.*), *Kaup, Natürl. Syst.* p. 93 (1829).
Turdus subpilaris, *Brehm, Vög. Deutschl.* p. 384 (1831).
Turdus juniperorum, *Brehm, loc. cit.* p. 385 (1831).
Merula pilaris (*Linn.*), *Selby, Brit. Orn.* i. p. 160 (1833).
Turdus fuscilateralis, *Brehm, Naum.* 1855, p. 281.
Planesticus pilaris (*Linn.*), *Jerd. B. Ind.* i. p. 530 (1862).

In the *adult male in autumn plumage* the forehead and crown are slate-grey, each feather narrowly margined with brown, and having concealed black centres; nape palish slate-grey; back and scapulars dark chestnut-brown, with obscure pale edges to most of the feathers, and more or less conspicuous dark centres; rump palish slate-grey, shading into a slightly darker slate-grey on the longest upper tail-coverts; lores and the ear-coverts immediately below the eye nearly black, the remainder of the ear-coverts slate-grey; traces of an obscure buff eye-stripe extending to the nape; wings and wing-coverts dark brown, with very narrow pale margins; primaries, primary-coverts, and a few of the outside wing-coverts with slate-grey on all or part of the outer webs; secondaries and the innermost wing-coverts with chestnut-brown on all or part of the outer webs, and generally paler and greyer towards the tips; tail dark brown, slightly paler at the tips of the outside feathers. Chin, throat, and breast buff, each feather having a nearly black fan-shaped terminal spot, nearly obsolete on the chin, narrow on the throat, but very conspicuous on the cheeks and breast; the sides of the breast and flanks are nearly black, each feather broadly fringed with white; belly white; under tail-coverts white, the basal half margined with brown; axillaries and under wing-coverts white; inner margin of quills pale brown. Bill yellow in summer, brown

in winter. Wings with the third and fourth primaries nearly equal and longest, second primary slightly longer than the fifth, bastard primary 0·85 to 0·65 inch. Legs, feet, and claws very dark brown. Length of wing 5·9 to 5·2 inches, tail 4·3 to 3·85, culmen 0·92 to 0·84, tarsus 1·3 to 1·2.

The *female* scarcely differs from the male. In *spring* the casting of the edges of the feathers produces a slight change: the hitherto concealed dark centres to the feathers on the forehead and crown become conspicuous; the buff shade on the throat and breast becomes paler and duller and the spots more distinct; the flanks also appear much darker, the white fringes to the feathers having been reduced to half their original length. *Birds of the year* scarcely differ from adults. *Young in first plumage* have light shaft-streaks and black terminal bars to most of the feathers on the upper parts. On the underparts the belly and flanks are spotted similarly to the breast.

The Fieldfare, or Blue-backed Thrush, breeds in the birch- and pine-forests of the Palæarctic Region, from the Atlantic to the valley of the Yenesay, occasionally extending its range northwards beyond the limit of forest-growth, and frequenting also in large colonies the birch-regions of north temperate Europe. It winters in the British Isles and Southern Europe, occurring very rarely in the Spanish peninsula, but crossing the Mediterranean to Morocco, Algeria, Egypt, and Nubia. In Asia it winters in Turkestan, Cashmere, and N.W. India.

a. Ad. st.	England.	J. Gould, Esq. [P.].
b. Ad. st.	Devonshire.	Col. Montagu [P.].
c. ♀ ad. sk.	Avington, Hants, Nov. 10, 1873.	R. B. Sharpe, Esq. [P.].
d, *e* ♂, *f* ♀ ad. sk.	Cookham, Dec. 28, 1874.	R. B. Sharpe, Esq. [P.].
g, *h*, *i* ♂ ad. sk.	Park Hatch, Godalming, Feb. 1857 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
k, *l*, *m*. Ad. sk.	Epping.	Henry Doubleday, Esq. [P.].
n. Ad. sk.	Kent.	Mr. F. Meadow [P.].
o. Ad. sk.	Cambridgeshire.	J. Clark, Esq. [P.].
p. Ad. sk.	Cambridgeshire.	Mr. J. Baker [C.]. (Partial albino.)
q. Ad. st.	Heligoland.	Henry Seebohm, Esq. [P.].
r. ♂ ad. sk.	Stockholm, May 21, 1873.	W. Meves, Esq. [C.].
s. Juv. sk.	Waxholm, July 13, 1873.	W. Meves, Esq. [C.].
t. ♀ ad. sk.	Skåne, May 9, 1868 (*W. Meves*).	R. B. Sharpe, Esq. [P.].
u. ♀ ad., *v*. Juv. sk.	Eidsvold, S. Norway, June 1866 (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
w, *x*. Ad. sk.	N. Africa.	Purchased.
y, *z*. ♂ ♀ ad. sk.	Balta Ziman, Turkey, March 4, 1877 (*W. Pearce*).	R. B. Sharpe, Esq. [P.].
a'. ♀ ad. sk.	Habarika, Petchora River, June 11, 1875.	Capt. Feilden and J. A. Harvie Brown, Esq. [P.].

b'. ♂ juv. sk.	Yalmal peninsula, Aug. 12, 1876.	Dr. O. Finsch [P.].
c'. ♂ ad. sk.	Yenesay, lat. 66½°, June 20, 1877.	Henry Seebohm, Esq. [P.].
d'. ♀ ad. sk.	Krasnoyarsk, May 1, 1879.	Henry Seebohm, Esq. [P.].
e'. Ad. sk.	Saherunpore (*Jameson*).	India Museum.
f', *g'*, *h'*. Sternum.		Purchased.
i', *k'*, *l'*. Skull.	Würtemberg.	Dr. A. Günther.

18. Turdus jamaicensis.

Jamaica Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 20 (1783).
Turdus jamaicensis, *Gmel. Syst. Nat.* i. p. 809 (1788); *Lath. Ind. Orn.* i. p. 328 (1790); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 234 (1818); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 271 (1850); *Sclater, P. Z. S.* 1859, p. 327; *id. Cat. Amer. B.* p. 3 (1862); *Baird, Rev. Am. B.* i. p. 23 (1864); *Gray, Hand-l. B.* i. p. 257. no. 3739 (1869); *Sel. & Salv. Nomencl. Av. Neotr.* p. 1 (1873).
Merula jamaicensis (*Gmel.*), *Gosse, B. Jamaica*, p. 142, *Ill.* pl. xxiv. (1847).
Turdus capucinus, *Hartl., fide Bp. Consp.* i. p. 271 (1850).
Turdus leucophthalma, *Hill, fide Bp. Consp.* i. p. 271 (1850).
Turdus lereboulleti, *Bp. Compt. Rend.* xxxviii. p. 3 (1854).

In the *adult male in spring plumage* the general colour of the upper parts is dark slate-grey, shading into russet-brown on the head; lores dark brown; ear-coverts russet-brown; no trace of eye-stripe; wings and tail dark brown; greater wing-coverts and innermost secondaries margined with dark slate-grey on the outer webs; cheeks russet-brown; chin and upper throat white, each feather having a fan-shaped terminal russet-brown spot; lower throat, breast, and flanks pale dull slate-grey, shading into white on the centre of the belly; under tail-coverts dark brown, with white centres running out to the tips; axillaries and under wing-coverts brown; inner margins of quills pale brown. Bill dark brown above and below. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary between the sixth and seventh, bastard primary 1·1 to 0·9 inch. Legs, feet, and claws dark brown. Length of wing 4·6 to 4·54 inches, tail 3·6 to 3·53, culmen 0·9 to 0·8, tarsus 1·4 to 1·3.

The *female* does not differ from the male. *Birds of the year* and *young in first plumage* appear to be undescribed.

The Jamaica Thrush is confined to the island of Jamaica, where it is a resident.

a. Ad. sk.	Jamaica.	Purchased.
b. ♂ ad. sk.	Moneague, Jamaica, Feb. 1865.	Dr. Bryant [P.].

19. Turdus phæopygus.

Turdus jamaicensis, *Gmel. apud Jardine, Ann. Nat. Hist.* 1847, xx. p. 329.
Turdus phæopygus, *Cab. Schomb. Reis. Guian.* iii. p. 666 (1848);

Cab. Mus. Hein. i. p. 4 (1850); *Licht. Nom. Av. Mus. Zool. Berol.* i. p. 26 (1854); *Sclater, P. Z. S.* 1859, p. 327; *id. Cat. Amer. B.* p. 3 (1862); *Léot. Ois. Trinid.* p. 197 (1866); *Scl. & Salv. P. Z. S.* 1867, p. 568, pl. xxix.; *Gray, Hand-l. B.* i. p. 257. no. 3738 (1869); *Scl. & Salv. Ex. Orn.* p. 149, pl. lxxv. (1869); *Pelz. Orn. Bras.* pp. 93, 421 (1871); *Scl. & Salv. P. Z. S.* 1873, p. 255; *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Layard, Ibis*, 1873, p. 376.

Planesticus phæopygus (*Cab.*), *Bp. Compt. Rend.* xxxviii. p. 3 (1854).

In the *adult male* the general colour of the upper parts is chocolate-brown, somewhat darker on the head, and shading into slate-brown on the rump and into slate-grey on the upper tail-coverts; lores and ear-coverts dark brown; no trace of eye-stripe; wings brown; wing-coverts, outer webs of innermost secondaries, and unemarginated portion of outer webs of quills russet-brown; tail brown. Chin white; cheeks and upper throat white, each feather having a fan-shaped dark-brown terminal spot; lower throat white; breast pale slate-grey, somewhat darker on the flanks, and shading into nearly white on the centre of the belly and into pure white on the under tail-coverts; axillaries and under wing-coverts pale slate-grey, obscurely margined with white; inner margin of quills pale brown. Bill dark brown above, paler underneath. Wings with the fourth and fifth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 0·9 to 0·75 inch. Legs, feet, and claws brown. Length of wing 4·4 to 3·7 inches, tail 3·9 to 3·3, culmen 0·85 to 0·75, tarsus 1·22 to 1·2.

The *female* does not differ from the male. Examples from Tobago are large, more olive in colour, and have the rump slate-grey; but skins from Trinidad are intermediate. *Birds of the year* show ochraceous tips to some of the greater wing-coverts. *Young in first plumage* have ochraceous shaft-lines and dark tips to most of the small feathers of the upper parts, and ochraceous centres and dark tips to the feathers of the underparts.

The range of Cabanis's White-throated Thrush may be said to be South America north of the Amazon, including the valley of that river. It has been recorded from East and West Guiana, the islands of Tobago and Trinidad, Venezuela and Colombia, and is also found in North Brazil, Para, East Ecuador, and North-east Peru.

a. Ad. st.	South America.	John Gould, Esq.
b. Ad. st.	South America.	
c, *d*. Juv., ad. sk.	Trinidad.	H. Seebohm, Esq. [P.].
e. Ad. sk.	Trinidad.	
f, *g*. Ad. sk.	Tobago.	Governor Ussher [P.].
h. ♀ ad. sk.	Chamicuros, Peruvian Amazons, Aug. 25, 1867.	E. Bartlett, Esq. [C.].
i. Ad. sk.	Demerara.	Eyton Coll.

20. Turdus albicollis.

Turdus albicollis, *Vieill. N. Dict. d'Hist. Nat.* xx. p. 227 (1818); *Gray, Gen. B.* i. p. 219 (1847); *Cab. Mus. Hein.* i. p. 5 (1850); *Bp. Consp.* i p. 272 (1850); *Licht. Nom. Av. Mus. Zool. Berol.*

p. 26 (1854); *Sclater, P. Z. S.* 1859, p. 329; *Sclater, Cat. Amer. B.* p. 4 (1862); *Euler, Journ. Orn.* 1867, pp. 189, 192, 198; *Scl. & Salv. Ex. Orn.* p. 141, pl. lxxi. (1868); *Gray, Hand-l. B.* i. p. 257. no. 3750 (1869); *Pelz. Orn. Bras.* pp. 93, 421 (1871); *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Berlepsch, Journ. Orn.* 1873, p. 229; *Cab. Journ. Orn.* 1874, p. 82.

In the *adult male* the general colour of the upper parts is dark russet-brown, shading into dark olive-brown on the head, and into greyish brown on the longest upper tail-coverts; lores and the sides of the head dark olive-brown; no trace of eye-stripe; wings brown; wing-coverts, innermost secondaries, and outside webs of quills dark russet-brown; tail brown. Chin and upper throat white, with very conspicuous, clearly defined, longitudinal dark-brown stripes; lower throat white; breast pale brown, shading into rufous brown on the sides of the neck, into *chestnut-brown on the flanks*, and into white on the belly and under tail-coverts; thighs brown; axillaries and under wing-coverts bright chestnut, sometimes greyish; inner margin of quills pale chestnut-brown, sometimes pale brown. Bill dark brown above, pale yellow below, darker towards the tip. Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary between the sixth and seventh; bastard primary 1·0 to 0·85 inch. Legs, feet and claws brown. Length of wing 4·65 to 4·35 inches, tail 3·85 to 3·65, culmen 0·88 to 0·83, tarsus 1·22 to 1·15.

It is not known that *the female* differs from the male. *Birds of the year* and *young in first plumage* appear to be unknown.

Vieillot's White-throated Thrush has hitherto only been found in East Brazil, from Bahia in the north, southwards in the neighbourhood of Rio Janeiro, and still further south at Santa Catherina.

a. Ad. st.	South America.	
b. Ad. sk.	Brazil.	Purchased.

Turdus crotopezus, Turdus tristis, and **Turdus leucauchen.**

This Thrush has three forms, which apparently interbreed, as every possible intermediate stage of plumage between them is found.

The synonymy of the South-American form is as follows:—

21. Turdus crotopezus.

Turdus crotopezus, *Licht. Verz. Doubl.* p. 38 (1823); *Max. Beitr.* iii. p. 646 (1831); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 272 (1850); *Cab. Mus. Hein.* i. p. 4 (1850); *Licht. Nom. Av. Mus. Zool. Berol.* p. 26 (1854); *Sclater, P. Z. S.* 1859, p. 327; *Sclater, Cat. Amer. B.* p. 3 (1862); *Euler, Journ. Orn.* 1867, p. 404; *Scl. & Salv. Ex. Orn.* p. 145, pl. lxxiii. (1869); *Gray, Hand-l. B.* i. p. 257. no. 3752 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Tacz. P. Z. S.* 1874, p. 503.
Turdus albicollis, *Vieill., apud Spix, Av. Bras.* i. p. 71, pl. lxx. (1824).

In the *adult male* the general colour of the upper parts is russet-brown, slightly darker on the head, shading into slate-grey on the

longest upper tail-coverts; lores and ear-coverts dark brown; no trace of eye-stripe; wings and bastard wing brown; wing-coverts, the unemarginated portion of the outside webs of the quills, and the outside webs of the innermost secondaries russet-brown; tail brown. Chin nearly white; the feathers of the cheeks and upper throat white, with fan-shaped dark-brown terminal spots; lower throat white; centre of breast greyish brown, shading into pale russet-brown on the sides of the breast and flanks, and into white on the centre of the belly and under tail-coverts; axillaries and under wing-coverts buff; inner margin of quills pale brown. Bill dark brown above, under mandible pale at the base. Wing with the fifth primary longest, second primary between the sixth and seventh, bastard primary 1·1 to 0·8 inch. Length of wing 4·7 to 4·4 inches, tail 4·0 to 3·4, culmen 0·81 to 0·86, tarsus 1·3 to 1·15.

The *female* is not known to differ from the male. *Birds of the year* and *young in first plumage* appear to be unknown.

Lichtenstein's White-throated Thrush is found on the west coast of Brazil, from Bahia to Rio Janeiro, where it is a resident. It has also been recorded from Central Peru.

a. Ad. sk. Bahia, Brazil. H. Seebohm, Esq. [P.].

The synonymy of the Mexican form is as follows:—

22. Turdus tristis.

Merula tristis, *Swains. Phil. Mag.* 1827, p. 369.
Turdus assimilis, *Cab. Mus. Hein.* i. p. 4 (1850); *Sclater, P. Z. S.* 1857, p. 202; *id. P. Z. S.* 1859, pp. 327, 362, 370; *Salvin, Ibis*, 1860, p. 272; *Sclater, Cat. Amer. B.* p. 3 (1862); *id. P. Z. S.* 1864, p. 172; *Baird, Rev. Am. B.* i. p. 24 (1864); *Sumichrast, Mem. Bost. Soc.* i. p. 543 (1869); *Gray, Hand-l. B.* i. p. 257. no. 3751 (1869).
Planesticus tristis (*Swains.*), *Bp. Compt. Rend.* xxxviii. p. 4 (1854).
Planesticus assimilis (*Cab.*), *Bp. Compt. Rend.* xxxviii. p. 4 (1854).
Turdus tristis (*Swains.*), *Licht. Nom. Av. Mus. Zool. Berol.* p. 26 (1854); *Sclater, Cat. Amer. B.* p. 4 (1862); *Scl. & Salv. P. Z. S.* 1870, p. 838; *Salvin, P. Z. S.* 1870, p. 180; *id. Ibis*, 1872, p. 314; *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 15 (1879).

In the *adult male in autumn plumage* the head, rump, and upper tail-coverts are olive-brown, shading into yellowish olive-brown on the back; lores brown; ear-coverts olive-brown; no trace of eye-stripe; wings brown, the outside webs margined with olive-brown; wing-coverts and innermost secondaries yellowish olive-brown; tail brown, the central four feathers margined with olive-brown. Chin and throat nearly white, each feather of the upper throat with a fan-shaped black terminal spot; breast and flanks pale olive-brown, shading into nearly pure white on the centre of the belly; under tail-coverts nearly white, with pale brown margins; axillaries and under wing-coverts deep buff; inner margin of quills pale buffish

brown. Bill yellowish brown above and below. Wing with the fourth and fifth primaries nearly equal and longest; second primary between the sixth and seventh, occasionally between the seventh and eighth; bastard primary 1·0 to 0·6 inch. Legs, feet, and claws brown. Length of wing 4·9 to 4·57 inches, tail 4·0 to 3·5, culmen 0·92 to 0·81, tarsus 1·25 to 1·1.

There appears to be no difference between *the sexes*. Before *spring* the yellower tint of the back has faded away, and the general colour of the upper parts has become a uniform olive-brown; the olive tint has also nearly gone from the breast and flanks, which become an almost neutral pale brown. *Birds of the year* generally have ochraceous tips to some of the greater wing-coverts, and occasionally dark tips to some of the feathers of the breast. *Young in first plumage* have the usual markings of nestling Thrushes.

Swainson's Thrush is found in South Mexico and the greater part of Central America. In Honduras, Nicaragua, and Costa Rica intermediate forms occur.

a. Ad. sk.	Costa Rica.	H. Seebohm, Esq. [P.]

The synonymy of the extreme form is as follows:—

23. Turdus leucauchen.

Turdus leucauchen, *Sclater, P. Z. S.* 1858, p. 447; *Scl. & Salv. Ibis*, 1859, p. 6; *Sclater, P. Z. S.* 1859, p. 328; *id. Cat. Amer. B.* p. 3 (1862); *Baird, Rev. Am. B.* i. p. 24 (1864); *Salvin, P. Z. S.* 1867, p. 132; *Lawr.** *Ann. L. New York*, ix. p. 91 (1868); *Gray, Hand-l. B.* i. p. 257. no. 3749 (1869); *Scl. & Salv. P. Z. S.* 1870, p. 838.

This form differs from the preceding in having the upper parts an almost uniform dark slate-grey, with a slight trace of olive; the olive-brown of the underparts has become grey; the axillaries and under wing-coverts are pale brown, dashed here and there with buff, and the inner margin of the quills is only slightly paler than the rest of the under surface. The dimensions and the wing-formula are the same.

This is apparently a local race; and can only claim subspecific rank, inasmuch as every possible intermediate form occurs between them, the two extreme forms being comparatively rare. It is found in Honduras, Nicaragua, Costa Rica, and North-eastern Guatemala.

a. ♂ ad. sk.	Guatemala, Nov. 1873 (*Salvin*).	H. Seebohm, Esq. [P.].
b, *c*. Ad. sk.	Guatemala.	Purchased.
d. Ad. sk.	Choctum, Vera Paz.	O. Salvin, Esq. [P.].
e. Ad. sk.	Vera Paz.	O. Salvin, Esq. [C.].

24. Turdus gymnophthalmus.

Turdus gymnophthalmus, *Cab. Schomb. Reis. Guian.* iii. p. 665 (1848); *Licht. Nom. Av. Mus. Zool. Berol.* p. 25 (1854); *Sclater, P. Z. S.* 1859, p. 329; *id. Cat. Amer. B.* p. 4 (1862); *Taylor, Ibis*,

* Spelt *leucauchan*.

1864, p. 80; *Scl. & Salv. Ex. Orn.* p. 151, pl. lxxvi. (1869); *Gray, Hand-l. B.* i. p. 257. no. 3740 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873).
Turdus nudigenis, *Lafr. Rev. Zool.* 1848, p. 4; *Léot. Ois. Trinid.* p. 201 (1866).
Turdus gymnopsis, *Temm., fide Bp. Consp.* i. p. 272 (1850).
Turdus caribbæus, *Lawr. Pr. U.S. Nat. Mus.* 1878, p. 267.
Turdus gymnogenys, *Scl. & Salv. Ibis*, 1879, p. 357.

In the *adult male* the general colour of the upper parts is dark olive-brown, darkest on the head; lores russet-brown; ear-coverts dark olive-brown; a small space behind the eye bare of feathers; wings and tail dark brown; innermost secondaries and outside webs of quills dark olive-brown. Underparts pale brown, palest on the chin, upper throat, centre of belly, and under tail-coverts; the chin, upper throat, and under tail-coverts streaked with dark brown; axillaries and under wing-coverts pale chestnut-brown; inner margins of quills pale brown. Bill pale yellow above and below, darker at the base of both mandibles. Wing with the fourth and fifth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 1·05 to 0·8 inch. Legs, feet, and claws brown. Length of wing 4·51 to 4·2 inches, tail 3·8 to 3·46, culmen 0·87 to 0·82, tarsus 1·3 to 1·2.

It is not known that there is any difference in the plumage of the sexes. *Birds of the year* have ochraceous tips to the greater wing-coverts. *Young in first plumage* have the characteristic ochraceous shaft-lines to the feathers of the upper parts, ochraceous centres to those of the underparts, and dark tips to both.

The Bare-eyed Thrush appears to be confined to the north-west of South America. It is found in Colombia, Venezuela, the islands of Trinidad and Tobago, and in Guiana as far west as Cayenne.

a, *b*. Ad. sk.	Caracas, Venezuela.	Mr. Dyson [C.].
c. Ad. sk.	Trinidad.	H. Seebohm, Esq. [P.].

Turdus leucomelas and Turdus ignobilis.

This Thrush has two forms, between which every intermediate variety appears to occur, leading to the supposition that they interbreed, and are consequently only subspecifically distinct.

25. Turdus leucomelas.

Turdus leucomelas, *Vieill. N. Dict. d'Hist. Nat.* xx. p. 238 (1818); *Hartl. Ind. Azara*, p. 6 (1847); *Gray, Gen. B.* i. p. 219 (1847); *Scl. & Salv. P. Z. S.* 1868, p. 138; *iid. Ex. Orn.* p. 143, pl. lxxii. (1868); *Gray, Hand-l. B.* i. p. 257. no. 3742 (1869); *Pelz. Orn. Bras.* pp. 93, 421 (1871); *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Tacz. P. Z. S.* 1874, p. 503; *Durnford, Ibis*, 1877, p. 166.
Turdus olivaceus, *Linn., apud Lafr. et d'Orb. Mag. de Zool., Syn. Av.* 1837, p. 17.

Turdus rufiventris, *Vieill., apud d'Orbign. Voy. Amér. mérid.* iv. pt. 3, p. 203 (circ. 1840).
Turdus amaurochalinus, *Cab. Mus. Hein.* i. p. 5 (1850); *Sclater, P. Z. S.* 1859, p. 329; *Scl. & Salv. P. Z. S.* 1866, p. 177; *iid. P. Z. S.* 1867, pp. 568, 749.
Planesticus amaurochalinus (*Cab.*), *Bp. Compt. Rend.* xxxviii. p. 3 (1854).
Turdus albiventris, *Spix, apud Sclater, P. Z. S.* 1858, p. 451; *apud Sclater, P. Z. S.* 1859, p. 328; *apud Sclater, Cat. Amer. B.* p. 3 (1862).
Turdus crotopezus, *Licht., apud Burm. Reise La Plata-St.* ii. p. 474 (1861).
Turdus poiteauii, *Less., fide Pelz. Orn. Bras.* p. 94 (1871).

In the *adult male* the general colour of the upper parts is brown, with a very slight tinge of olive or slate, somewhat darker on the head; lores nearly black; ear-coverts dark brown; no trace of eye-stripe. Chin, cheeks, and upper throat buffish white, each feather having a long fan-shaped dark-brown terminal spot; lores, throat, and flanks pale buffish brown, shading into nearly white on the centre of the belly and under tail-coverts; axillaries and under wing-coverts pale buffish brown, obscurely margined with buff; inner margin of quills pale buffish brown. Bill yellow above and below. Wings with the fourth and fifth primaries nearly equal and longest, second primary between the sixth and seventh, bastard primary 0·95 to 0·9 inch. Legs, feet, and claws dark brown. Length of wing 4·7 to 4·25 inches, tail 4·2 to 3·85, culmen 0·93 to 0·87, tarsus 1·25 to 1·15.

There is no difference in the colour of the sexes. *Birds of the year* and *young in first plumage* have the usual characteristics of immature birds of this genus.

The typical form of the Common South-American Thrush has a very wide range, having been found in Guiana, Brazil from Bahia to Santa Catherina, and southwards to Rio Negro and Chili, in all which provinces it is supposed to be a resident. Intermediate forms appear on the Pacific slope of the Andes of Ecuador, and in the valley of the Upper Amazons in Northern Peru, whilst in Colombia the extreme form occurs.

a. ♀ ad. sk.	Lower Ucayali.	E. Bartlett, Esq. [C.].
b. ♀ ad. sk.	Xeberos, Peruvian Amazons, June 14, 1866.	E. Bartlett, Esq. [C.].
c. Ad. sk.	Paysandu, Buenos Ayres Aug. 1877.	Alan Peel, Esq. [C.].
d. Ad. st.	Rio Negro (*C. Darwin*).	Zoological Society.
e. Ad. st.	Brazil.	John Gould, Esq. [P.].
f, *g*. ♂ ad. sk.	Chili.	Zoological Society

The synonymy of the Colombian form is as follows:—

26. Turdus ignobilis.

Turdus ignobilis, *Sclater, P. Z. S.* 1857, p. 273; *id. P. Z. S.* 1859, p. 328; *id. Cat. Amer. B.* p. 3 (1862).

In the *adult male* the general colour of the upper parts is dark olive-brown; lores black; ear-coverts dark olive-brown; no trace of eye-stripe; wings and tail brown; outer webs of feathers margined with olive-brown; innermost secondaries dark olive-brown. Chin and upper throat pale brown, each feather having a long, fan-shaped, brown terminal spot; lower throat, breast, and flanks pale brown, shading into nearly white on the centre of the belly and under tail-coverts, the latter having brown sides; axillaries pale brown; under wing-coverts buff; inner margin of quills greyish buff. Bill dark brown above and below. Wings with the fourth and fifth primaries nearly equal and longest, second primary about equal to the eighth, bastard primary 0·95 to 0·9 inch. Legs, feet, and claws dark brown. Length of wing 4·6 to 4·5 inches, tail 3·8 to 3·5, culmen 0·89 to 0·87, tarsus 1·22.

It is not known that the *female* differs from the male. *Birds of the year* and *young in first plumage* appear to be unknown.

a. Ad. sk.	Bogotá.	P. L. Sclater, Esq. [P.]. (Type of *T. ignobilis*, Sclater.)
b. ♀ ad. sk.	Medellin.	T. K. Salmon, Esq. [C.].

27. Turdus plebeius.

Turdus plebeius, *Cab.** *Journ. Orn.* 1860, p. 323; *Lawr. Ann. L. New York*, ix. p. 91 (1864); *Frantz.** *Journ. Orn.* 1869, p. 290; *Gray**, *Hand-l. B.* i. p. 258. no. 3754 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873); *Salv. & Godm. Biol. Cent.-Amer. Zool., Aves*, i. p. 17 (1879).

In the *adult male* the general colour of the upper parts is an almost uniform olive-brown, greyer on the inner webs of the quills. Underparts pale brown, darkest on the cheeks and flanks and slightly paler on the centre of the belly; under tail-coverts brown in centre, broadly and distinctly margined, first with brownish white, then with brown, and finally with brownish white; axillaries and under wing-coverts pale brown, obscurely margined with chestnut; inner margins of quills scarcely paler than the rest of the under surface. Bill dark brown. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary between the sixth and seventh, bastard primary 1·05 to 0·8 inch. Legs, feet, and claws brown. Length of wing 5·52 to 5·07 inches, tail 4·25 to 3·8, culmen 0·96 to 0·93, tarsus 1·28 to 1·26.

It is not known that the *female* differs from the *male*. *Birds of the year* and *young in first plumage* appear to be unknown.

The Costa-Rican Thrush appears to be confined to the province of Costa Rica, in Central America, where it is supposed to be a resident.

The British Museum does not possess an example of this species; but skins may be seen in the collections of Dr. Sclater, Messrs. Salvin and Godman, and my own.

* Spelt *plebejus*.

28. Turdus albiventer.

Turdus albiventer, *Spix, Av. Bras.* i. p. 70, pl. lxix. fig. 1 (1824); *Cab. Schomb. Reis. Guian.* iii. p. 666 (1848); *id. Mus. Hein.* i. p. 4 (1850); *Scl. & Salv.** *P. Z. S.* 1867, p. 568; *Gray, Hand-l. B.* i. p. 257. no. 3743 (1869); *Scl. & Salv.** *Ex. Orn.* p. 147, pl. lxxiv. (1869); *iid.** *P. Z. S.* 1870, p. 780; *Pelz. Orn. Bras.* pp. 93, 421 (1871); *Scl. & Salv.** *Nomencl. Av. Neotr.* p. 1 (1873).

Turdus ephippialis, *Sclater, P. Z. S.* 1862, p. 109; *id. Cat. Amer. B. App.* p. 358 (1862).

In the *adult male in autumn plumage* the general colour of the upper parts is russet-brown, shading into olive-brown on the rump and upper tail-coverts, and into slaty brown on the head and nape; lores dark brown; ear-coverts slaty brown; no trace of eye-stripe; wings brown; wing-coverts, innermost secondaries, and outside webs of quills russet-brown; tail brown, outside webs olive-brown. Chin and upper throat greyish white, each feather with long fan-shaped dark-brown terminal streaks or spots; breast brown, shading into russet-brown on the flanks, and into white on the vent; under tail-coverts brown broadly margined with white; axillaries and under wing-coverts bright chestnut; inner margin of quills pale chestnut-brown. Bill dark brown, slightly paler on the under mandible. Wing with the fourth primary slightly the longest, second primary between the seventh and the eighth, bastard primary 1·0 to 0·9 inch. Legs, feet, and claws brown. Length of wing 4·58 to 4·3 inches, tail 3·8 to 3·65, culmen 0·85 to 0·83, tarsus 1·26 to 1·21.

There is apparently no difference between the *sexes*. In *summer* the russet-brown of the upper parts becomes greyer. *Birds of the year* have ochraceous tips to the greater wing-coverts. *Young in first plumage* resemble the young of the allied species.

Spix's Thrush appears to be found throughout the north of the continent of South America, having been obtained from Colombia, Venezuela, Guiana, and Brazil as far south as Bahia.

a, b. Ad. sk. Bahia, Brazil. H. Seebohm, Esq. [P.].

Turdus fumigatus and Turdus hauxwelli.

This Thrush has two extreme forms having different geographical ranges. In the intervening districts intermediate forms occur, leading to the conclusion that they interbreed. The synonymy of the typical form is as under:—

29. Turdus fumigatus.

Turdus fumigatus, *Licht. Verz. Doubl.* p. 38 (1823); *Cab. Schomb. Reis. Guian.* iii. p. 665 (1848); *id. Mus. Hein.* i. p. 4 (1850); *Licht. Nom. Av. Mus. Zool. Berol.* p. 26 (1854); *Sclater, P. Z. S.* 1859, p. 329; *Taylor, Ibis*, 1864, p. 80; *Sclater, Cat. Amer. B.* p. 4 (1862); *Scl. & Salv. P. Z. S.* 1866, p. 177; *iid. P. Z. S.* 1868, p. 106; *Gray, Hand-l. B.* i. p. 258. no. 3757 (1869); *Finsch, P. Z. S.* 1870, p. 554; *Pelz. Orn. Bras.* pp. 94, 421 (1871); *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Layard, Ibis*, 1873, p. 376.

* Spelt *albiventris*.

Turdus ferrugineus, *Neuwied, Beitr. Naturg. Bras.* iii. p. 649 (1831); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 272 (1850).
Turdus olivaceus, *Linn., apud d'Orb. et Lafr. Mag. Zool., Syn. Av.* 1837, p. 17.

In the *adult male* the general colour of the upper parts is dark ochraceous brown, slightly darker on the lores and ear-coverts; no trace of eye-stripe; wings brown; wing-coverts, innermost secondaries, tail, and outside webs of quills dark ochraceous brown. Underparts pale ochraceous brown, shading into ochraceous white on the centre of belly, under tail-coverts, chin, and upper throat, the two latter having obscure brown longitudinal streaks and the under tail-coverts being obscurely margined with ochraceous; thighs pale brown; axillaries and under wing-coverts rich ochraceous brown; inner margin of quills pale chestnut-brown. Bill dark brown above, brown below. Wing with the fifth primary very slightly the longest, second primary between the seventh and eighth, bastard primary 0·9 to 0·72 inch. Legs, feet, and claws dark brown. Length of wing 4·45 to 4·1 inches, tail 3·4 to 3·34, culmen 0·9 to 0·86, tarsus 1·23 to 1·2.

The *female* scarcely differs from the *male*. *Birds of the year* have generally some ochraceous tips to the greater wing-coverts. *Young in first plumage* resemble the young of the allied species.

The typical form of the Sabian Thrush is found in the north of South America, having been obtained from Venezuela, the island of Trinidad, and Guiana. Intermediate forms (of which, unfortunately for the technicalities of nomenclature, Lichtenstein's type happens to be one) occur in Amazonia, Para, and Eastern Brazil as far as Bahia; whilst in Eastern Peru, in the valley of the Upper Amazon, occurs the extreme form.

a. Ad. st.	South America.	
b. ♀ ad. sk.	San Esteban, Venezuela, March 1868.	A. Goering, Esq. [C.].
c. Ad. sk.	Orinoco.	H. Seebohm, Esq. [P.].

The synonymy of the Peruvian form of the Sabian Thrush is as under:—

30. Turdus hauxwelli.

Turdus hauxwelli, *Lawrence, Ann. L. N. H. New York*, ix. p. 265 (1870).
Turdus fumigatus, *Licht. apud Scl. & Salv. P. Z. S.* 1873, p. 255.

This form differs from its ally solely in being somewhat darker and greyer in colour. The dark ochraceous brown of the upper parts is replaced by dark chestnut-brown. The underparts are dull russet-brown, shading into brownish white on the centre of the belly, and obscurely streaked with darker brown on the chin and upper throat; the under tail-coverts are pale russet-brown, still paler at the tips; axillaries and under wing-coverts as in *T. fumigatus*, but inner margin of quills much browner. There is no difference in the colour of the bill or feet, or in the wing-formula. Length of wing 4·3 to 4·06 inches, tail 3·55 to 3·2, culmen 0·85 to 0·82, tarsus 1·2 to 1·15, bastard primary 0·92 to 0·7.

The *female* does not differ from the male. *Birds of the year* and *young in first plumage* appear to be unknown.

a. ♀ ad. sk. Yquitos, Peru, October 5 (*H. Whitely*). Henry Seebohm, Esq. [P.].

31. Turdus obsoletus.

Turdus obsoletus, *Lawr. Ann. L. New York*, 1862, p. 470; *Baird, Rev. Am. B.* i. p. 28 (1864); *Salvin, P. Z. S.* 1867, p. 133; *Lawr. Ann. L. New York*, ix. pp. 91, 145 (1868); *Frantzius, Journ. Orn.* 1869, p. 290; *Salvin, Ibis*, 1869, p. 312; *Gray, Hand-l. B.* i. p. 258. no. 3772 (1869); *Salvin, P. Z. S.* 1870, p. 180; *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 19 (1879).

In the *adult male in autumn plumage* the general colour of the upper parts is an almost uniform dark russet-brown, very slightly darker on the head and considerably greyer on the inside webs of the quills; the general colour of the underparts is pale russet-brown, shading into white on the centre of the belly, and obscurely streaked with darker brown on the chin and upper throat. Under tail-coverts white, with pale russet-brown bases and sides; axillaries and under wing-coverts rich ochraceous brown; inner margin of quills pale chestnut-brown. Bill dark brown above and below. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the sixth and seventh, bastard primary 1·0 to 0·8 inch. Legs, feet, and claws dark brown. Length of wing 4·95 to 4·8 inches, tail 3·75 to 3·4, culmen 0·95 to 0·85, tarsus 1·2.

It is not known that there is any *sexual* difference worth recording, or that any appreciable change is produced by abrasion. In *young in first plumage* most of the feathers of the upper parts have ochraceous shafts, and the scapulars and wing-coverts ochraceous tips. The underparts are also much suffused with ochraceous, especially on the breast and flanks, and most of the feathers have more or less obscure dark-brown tips; the inner margin of the quills is also more ochraceous.

Lawrence's Sabian Thrush, the Central-American form of *T. fumigatus*, appears to be confined to the provinces of Costa Rica and Panama in Central America, where it is supposed to be a resident.

The British Museum does not possess an example of this species; but skins are in the collection of Messrs. Salvin and Godman and in my own.

32. Turdus nigrirostris.

Turdus nigrirostris, *Lawrence, Ann. New York Ac. Sc.* i. p. 147 (1878); *id. Pr. U.S. Nat. Mus.* 1879, p. 267.

This is an island form of *T. fumigatus*, and differs from that species and from *T. hauxwelli* in having the general colour of the upper parts dark russet-brown, with scarcely any chestnut tint. The underparts are slightly paler and greyer than those of *T. hauxwelli*, and much less ochraceous than those of *T. fumigatus*; and most

of the feathers of the underparts have dark shaft-lines. In all other respects this species agrees with *T. hauxwelli*. It probably owes its claim to specific rank solely to the accident of its having become isolated on an island and thus having no opportunity of interbreeding with its near allies. Length of wing 4·6 to 4·35 inches, tail 3·4 to 3·26, culmen 0·96 to 0·94, tarsus 1·32, bastard primary 1·05 to 0·95.

The St.-Vincent Sabian Thrush appears to be confined to the island of St. Vincent in the West Indies.

The British Museum does not possess an example of this species; but I have examined a skin in the Cambridge Museum, and the types in the Museum of the Smithsonian Institution in Washington.

Turdus grayii and Turdus casius.

This Thrush has two extreme forms, between which intermediate forms occur.

33. Turdus grayii.

Turdus helvolus, *Licht. Preis-Verz. Mex. Vög.* no. 85 (1830, *descr. nulla*); *Licht. Nom. Av. Mus. Zool. Berol.* p. 26 (1854); *Cab. Journ. Orn.* 1863, p. 57.

Turdus grayii, *Bp. P. Z. S.* 1837, p. 118; *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 272 (1850); *Cab. Mus. Hein.* i. p. 4 (1850); *Sclater, P. Z. S.* 1859, p. 330; *Scl. & Salv. Ibis*, 1859, p. 5; *Cab. Journ. Orn.* 1860, p. 323; *Owen, Ibis*, 1861, p. 60; *Baird, Rev. Am. B.* i. p. 26 (1864, *partim*); *Lawr. Ann. L. N. H. New York*, ix. pp. 91, 199 (1868); *Sumichrast, Mem. Bost. Soc. N. H.* i. p. 543 (1869); *Gray, Hand-l. B.* i. p. 257. no. 3741 (1869); *Frantzius, Journ. Orn.* 1869, p. 290; *Scl. & Salv. P. Z. S.* 1870, p. 836; *Grayson, Pr. Bost. Soc. N. H.* xiv. p. 276 (1871); *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873).

Planesticus grayii (*Bp.*), *Bp. Compt. Rend.* xxxviii. p. 4 (1854).

Planesticus luridus, *Bp. Compt. Rend.* xxxviii. p. 4 (1854).

Turdus tristis, *Swains., apud Sclater, P. Z. S.* 1856, p. 294.

Turdus luridus (*Bp.*), *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873).

In the *adult male* the general colour of the upper parts is uniform olive-brown; inside webs of quills and tail brown; lores brown; no trace of eye-stripe. Underparts uniform pale buffish brown, slightly paler on the centre of the belly, chin, and upper throat, the latter with long fan-shaped terminal brown streaks; axillaries and under wing-coverts pale chestnut; inner margin of quills pale chestnut. Bill dark brown above and below. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 1·05 to 0·8 inch. Legs, feet, and claws dark brown. Length of wing 4·7 to 4·3 inches, tail 3·9 to 3·55, culmen 0·93 to 0·84, tarsus 1·3 to 1·2.

The *female* does not differ from the male *birds of the year*; and *young in first plumage* have all the characteristic markings of the same plumage of allied species.

Typical forms of Gray's Thrush are found in the Tres Marias Islands and on the mainland of West Central Mexico, extending

southwards, through Vera Cruz, and throughout Central America into Colombia.

a, b. ♂ ad. sk.	Mexico.	Purchased.
c. Ad. sk.	Guatemala.	Purchased.
d. Ad. sk.	New Granada.	Purchased. (Type of *Planesticus luridus*, Bonap.)

The synonymy of the conspecific form is as follows:—

34. Turdus casius.

Planesticus casius, *Bp. Compt. Rend.* xli. p. 657 (1855).
Turdus cæsius (*Bonap.*), *Gray, Hand-l. B.* i. p. 257. no. 3744 (1869).
Turdus casius (*Bonap.*), *Sclater, P. Z. S.* 1859, p. 330; *Lawr. Ann. L. N. H. New York*, vii. p. 326 (1862).
Turdus grayii, *Bonap., apud Baird, Rev. Am. B.* i. p. 26 (1864, *partim*), *apud Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 18 (1879, *partim*).

This form only differs from the preceding in having the upper parts russet-brown instead of olive-brown.

Bonaparte's form of Gray's Thrush is a local race, which has become partially differentiated from its near ally in Panama.

a. Ad. sk.	Panama.	Capt. Kellett and Lieut. Wood [P.]. (Type of *Planesticus casius*, Bonap.)

35. Turdus migratorius.

La Grive de Canada, *Briss. Orn.* ii. p. 225 (1760).
Turdus migratorius, *Linn. Syst. Nat.* i. p. 292 (1766); *Gmel. Syst. Nat.* i. p. 811 (1788); *Lath. Ind. Orn.* i. p. 330 (1790); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 230 (1818); *Wilson, Amer. Orn.* i. p. 35, pl. ii. fig. 2 (1808); *Audub. Orn. Biogr.* ii. p. 190 (1834); *Temm. Man. d'Orn.* iii. p. 91 (1835); *Bp. Comp. List B. Eur. & N. Amer.* p. 17 (1838); *Keys. u. Blas. Wirb. Eur.* pp. lii. 178 (1840); *Gray, Gen. B.* i. p. 219 (1847); *Degl. Orn. Eur.* i. p. 462 (1849); *Bp. Consp.* i. p. 272 (1850); *Cab. Mus. Hein.* i. p. 4 (1850); *Sclater, P. Z. S.* 1856, p. 294; *id. P. Z. S.* 1859, p. 331; *id. Cat. Amer. B.* p. 4 (1862); *Newt. List B. Eur. Blasius*, p. 9 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 406 (1867); *Dall & Bann. Tr. Chic. Acad.* i. p. 276 (1869); *Gray, Hand-l. B.* i. p. 257. no. 3747 (1869); *Fritsch, Vög. Eur.* p. 143 (1870); *Coues, Key N. Amer. B.* p. 72 (1872); *id. B. N. West*, p. 228 (1874).
La Litorne de Canada, *Montb. Hist. Nat. Ois.* iii. p. 307 (1775).
Grive du Canada, *Daubent. Pl. Enl.* no. 556. fig. 1 (1775).
Turdus canadensis, *P. L. S. Müll., Linn. Syst. Nat.* Anhang, p. 140 (1776).
Red-breasted Thrush, *Lath. Gen. Syn.* ii. p. 26 (1783).
Merula migratoria (*Linn.*), *Sw. Faun. Bor.-Amer. Birds*, ii. p. 176 (1831); *Gould, B. Eur.* ii. pl. 74 (1837).
Turdus (Planesticus) migratorius (*Linn.*), *Baird, Cass., & Lawr. B. N. Amer.* p. 218 (1858); *Coues, Birds Colorado Vall.* p. 8 (1878).
Planesticus migratorius (*Linn.*), *Coues, Ibis*, 1865, p. 163; *Gundlach, Journ. Orn.* 1872, p. 405.

In the *adult male in spring plumage* the head, lores, and ear-coverts are black; round the eye and a spot in front white; fea-

thers of the nape brown with black centres; back and scapulars slate-grey suffused with olive, shading into nearly slate-grey on the rump; upper tail-coverts dark brownish slate-grey; primary-coverts and quills dark brown, with narrow pale margins; wing-coverts and innermost secondaries dark brown, shading into pale greyish brown on the margin; tail nearly black, the inside webs of the outside feathers on each side more or less broadly tipped with white. Cheeks black, pencilled with white; chin and upper throat white, each feather with a broad black shaft-streak; lower throat, breast, belly, flanks, axillaries, and under wing-coverts rich deep chestnut; feathers round the vent white; under tail-coverts dark brown, with white shaft-streaks and tips. Bill yellow, dusky at the extreme tip. Wings with the third, fourth, and fifth primaries nearly equal and longest; second primary intermediate in length between the fifth and sixth; bastard primary 0·95 to 0·6 inch. Legs, feet, and claws dark brown. Length of wing 5·4 to 4·9 inches, tail 4·12 to 3·7, culmen 0·92 to 0·78, tarsus 1·35 to 1·15.

The *female* differs from the male in being slightly paler in colour both on the upper and underparts. *After the autumn moult* the upper parts of both sexes are more suffused with olive; the black feathers of the head have olive-brown margins, the chestnut feathers of the breast have grey margins, and those of the belly white margins. *Birds of the year* have chestnut tips to most of the wing-coverts. *Young in first plumage* have also white shaft-lines and black tips to most of the small feathers of the upper parts, and black fan-shaped terminal spots to the feathers of the underparts.

American ornithologists distinguish between the Eastern and Western forms of this bird, maintaining that the former is smaller with a much blacker tail, and with the white tips to the outside tail-feathers much more developed. After an examination of a large series from various localities, I am unable to discover any such distinction. I have both forms from California, Vancouver's Island, and Toronto. (*Conf.* Ridgw. Bull. Nutt. Orn. Club, 1877, p. 8.)

The Red-breasted Thrush, or American Robin, breeds throughout the whole of Alaska, British North America, and parts of Greenland, up to, and occasionally north of, the Arctic Circle, retiring southwards in autumn, and passing the Bermudas on migration. In the United States and in the highlands of Mexico it is a resident, the numbers being largely increased in autumn, at which season of the year it occasionally strays to Guatemala and Cuba, and has even been recorded from Europe.

a. Ad. st.	Arctic America.	Adm. Sir G. Back [P.].
b. Ad. sk.	Franklin Fort.	Adm. Sir G. Back [P.].
c. Ad. sk.	Behrings Straits.	Capt. Kellett and Lieut. Wood [P.].
d. ♀ ad. sk.	Salt River.	B. R. Ross, Esq. [P.].
e. ♀ ad. sk.	Fort Simpson.	B. R. Ross, Esq. [P.].
f, *g*. ♂ ♀ ad. sk.	Fort Dufferin (*Dawson*).	Boundary Commission.
h, *i*. ♂ ad.; *k*. ♀ ad. sk.	Ann Arbor, Michigan.	Prof. J. B. Steere [P.].

l. Ad. sk.	N.W. America.	Dr. Lyall [P.].
m. Ad. sk.	Saturna Island.	Dr. Lyall [P.].
n. Ad. sk.	Vancouver Island.	J. K. Lord, Esq. [P.].
o,p. ♂ ad.; *q.* ♀ ad. sk.	West side of Rocky Mountains.	J. K. Lord, Esq. [P.].
r. Ad. sk.	Mexico.	Purchased.
s,t. Skeletons.	N. America.	Purchased.

36. Turdus confinis.

Turdus confinis, *Baird, Review*, p. 29 (1864); *Elliot, New & Unfig. B. N. Amer.* p. 3 (1869); *Gray, Handl-l. B.* i. p. 258. no. 3756 (1869); *Cooper, B. Calif. ed. Baird*, p. 9 (1870).

Turdus migratorius, *Linn.*, var. confinis, *Baird, Coues, Key N. Amer. B.* p. 72 (1872); *Baird, Brewer, & Ridgw. Hist. N. Amer. B.* i. p. 27, pl. ii. fig. 1 (1874).

This species (founded upon a single skin) appears to be a desert form of the preceding, differing in having the general colour of the upper parts a pale greyish brown, slightly darker on the centre of the feathers of the head; the axillaries and belly are pale buff, slightly darker on the flanks and sides of the breast; chin and throat white, streaked with greyish brown. Length of wing 5·1 inches, tail 3·6, culmen 0·95, tarsus 1·25. Wing-formula the same as in the preceding. This supposed species may probably prove to be only an unusually pale example of the common one—in fact, an accidental variety.

The only example known of the Cape-St.-Lucas Robin-Thrush was obtained at Todos Santos, in the extreme south of the Californian peninsula.

The above description is taken from the type in the museum of the Smithsonian Institution in Washington.

37. Turdus rufiventer.

Turdus rufiventris, *Vieill. N. Dict. d'Hist. Nat.* xx. p. 226 (1818); *Spix**, *Av. Bras.* i. p. 70, pl. lxxiii. (1824); *Neuwied, Beitr. Naturg. Bras.* iii. p. 639 (1831); *D'Orbign. Voy. Amér. mérid.* p. 203 (circ. 1840); *Gould**, *Darwin's Voy. Beagle, Birds*, iii. p. 59 (1841); *Cab. Mus. Hein.* i. p. 3 (1850); *Licht. Nomenol. Av.* p. 26 (1854); *Burm. Th. Bras.* iii. p. 122 (1855); *Sclater, P. Z. S.* 1859, p. 332; *Burm. Reise La Plata-St.* ii. p. 474 (1861); *Sclater, Cat. Amer. B.* p. 5 (1862); *Euler, Journ. Orn.* 1867, pp. 186, 189, 190, 192, 198, 403; *Scl. & Salv. P. Z. S.* 1868, p. 138; *Gray, Hand-l. B.* i. p. 257. no. 3745 (1869); *Pelz. Orn. Bras.* pp. 94, 421 (1871); *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873); *Berlepsch, Journ. Orn.* 1873, p. 228.

Turdus chochi, *Vieill. N. Dict. d'Hist. Nat.* xx. p. 226 (1818); *D'Orb. et Lafr. Mag. de Zool., Syn. Av.* 1837, p. 16; *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 272 (1850).

In the *adult male* the general colour of the upper parts is ash-grey inclining to olive, very slightly darker on the head; lores

* Spelt *rufiventer*.

J.G.Keulemans del. Mintern Bros. imp.

Turdus magellanicus.

paler; no trace of eye-stripe; wings and tail brown; wing-coverts, innermost secondaries, and outside webs of quills and tail-feathers the same colour as the back. Breast pale brown, shading into nearly white on the chin and upper throat, and into rich chestnut on the flanks, which becomes somewhat paler on the belly and under tail-coverts; the chin and throat, and frequently the breast, have somewhat obscurely defined longitudinal streaks of darkish brown; axillaries and under wing-coverts rich chestnut; inner margin of quills pale chestnut-brown. Bill dark brown above, brown below. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the seventh and eighth, bastard primary 0·85 to 1·1 inch. Legs, feet, and claws brown. Length of wing 4·6 to 4·25 inches, tail 4·1 to 3·8, culmen 0·96 to 0·91, tarsus 1·4 to 1·25.

Examples from Buenos Ayres are more suffused with olive on the upper parts.

The *female* does not differ from the male. *Birds of the year* and *young in first plumage* possess all the characteristic markings of the same stages of plumage of allied species.

The Chestnut-bellied Thrush appears to be confined to the central and eastern portions of South America, having been found from Bahia to Buenos Ayres, and in the interior of Bolivia.

a, *b*. Ad. sk.	Chili [?].	Zoological Society.
c. Ad. sk.	Punta Lara, Buenos Ayres, May 25, 1876.	Henry Durnford, Esq. [C.].
d. ♀ ad. sk.	Uruguay, Sept. 1877.	Alan Peel, Esq. [C.].
e, *f*. Ad. sk.	Bahia, Brazil.	H. Seebohm, Esq. [P.].
g. Ad. sk.	Brazil.	M. Claussen [P.].
h. Ad. st.	South America.	
i. Ad. st.	South America.	J. Gould, Esq.
k. Ad. sk.	Interior of Bolivia (*Brydges*).	Eyton Coll.

38. Turdus magellanicus. (Plate XIV.)

Turdus magellanicus, *King, P. Z. S.* 1830, p. 14; *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 272 (1850, *partim*); *Cab. Mus. Hein.* i. p. 3 (1850); *Licht. Nom. Av. Mus. Zool. Berol.* p. 26 (1854); *Durnford, Ibis*, 1878, p. 392.

Turdus falklandiæ, *Quoy et Gaim., apud D'Orbign. Voy. Amér. mérid. Ois.* p. 202 (circ. 1840).

Turdus falklandicus, *Quoy et Gaim., apud Gould, Darwin's Voy. Beagle, Birds*, p. 59 (1841, *partim*); *apud Sclater, P. Z. S.* 1859, p. 330 (*partim*); *apud Sclater, Cat. Amer. B.* p. 4 (1862, *partim*); *apud Gray, Hand-l. B.* i. p. 257. no. 3746 (1869, *partim*), *apud Sclater & Salvin, Nomencl. Av. Neotr.* p. 2 (1873, *partim*).

Merula falklandica (*Quoy et Gaim.*), *apud Cassin, U.S. Expl. Exp., Mamm. & Orn.* p. 157 (1858).

In the *adult male* the head and ear-coverts are dark brown, nearly black, the feathers on the forehead with paler edges; lores black; no trace of eye-stripe; rest of upper parts brown, shading into dull slate-grey on the rump; primaries, primary-coverts, and tail dark brown; secondaries broadly edged with paler brown on the outer webs; entire outer webs of innermost secondaries olive-brown. Chin and upper throat greyish white, each feather with a long fan-

shaped terminal black streak or spot; the rest of the underparts buffish brown, shading into buff on the centre of belly; under tail-coverts buffish white margined at the sides with brown; axillaries and under wing-coverts pale buffish brown; inner margin of quills scarcely paler than rest of under surface. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest; second primary intermediate in length between the sixth and seventh; bastard primary 1·0 to 0·8 inch. Length of wing 5·5 to 5·0, tail 4·5 to 4·1, culmen 1·05 to 0·95, tarsus 1·6 to 1·5. Legs, feet, and claws pale.

The female does not differ from the male. *Birds of the year* are browner on the rump and upper tail-coverts than adults. *Young in first plumage* have the usual markings of the allied species at this stage.

The Patagonian Thrush occurs on the islands of Mas Afuera and Juan Fernandez, in Chili and Patagonia, and in the island of Terra del Fuego. It is not known to be migratory.

a, *b*, *c*. ♂; *d*, *e*. ♀ ad. sk.	Juan Fernandez (*J. Murray*).	Challenger Exp.
f, *g*. Juv. sk.	Gray Harbour, Messier Channel (*J. Murray*).	Challenger Exp.
h. ♀ ad.; *i*. Juv. sk.	Port Currucha (*J. Murray*).	Challenger Exp.
k. ♂ ad. sk.	Cockle Cove, Straits of Magellan.	Dr. Coppinger [C.].
l. Juv. sk.	Tom Bay, Straits of Magellan.	Dr. Coppinger [C.].
m. Ad. sk.	Esmeraldas.	Capt. Kellet and Lieut. Wood [C.].
n. Ad.; *o*. ♀ ad. sk.	Hermit Island.	Antarctic Expedition.
p. Ad. sk.	South America.	Sir W. Burnett and Adm. Fitzroy [C.].

39. **Turdus falklandicus.** (Plate XIII.)

Turdus falcklandii, *Quoy et Gaim. Voy. de l'Uranie*, p. 104 (1824).
Turdus falklandicus (*ex Quoy et Gaim.*), *Gould, Darwin's Voy. Beagle, Birds*, p. 59 (1841, *partim*); *Sclater, P. Z. S.* 1859, p. 330 (*partim*); *id. Cat. Amer. B.* p. 4 (1862, *partim*); *Gray, Hand-l. B.* i. p. 257. no. 3746 (1869, *partim*); *Scl. et Salv. Nomencl. Av. Neotr.* p. 2 (1873, *partim*).
Turdus magellanicus, *King, apud Bp. Consp.* i. p. 272 (1850, *partim*).
Turdus maluinarum, *Licht., fide Bp. Consp.* i. p. 272 (1850).

This species differs from the preceding, with which it has generally been confounded, in having the head chocolate-brown, and the rest of the upper parts rich russet-brown, slightly suffused with olive on the rump. The underparts are pale russet-brown, darkest on the breast. The ground-colour of the chin and upper throat is pale russet-brown instead of greyish white, causing the streaks to appear less distinct. The wing-formula of both species alike. Length of wing 5·6 to 5·2 inches, tail 4·4 to 4, culmen 1·2 to 1·1, tarsus 1·6 to 1·45.

The Falkland-Island Thrush is believed to be confined to the

J. G. Keulemans del. Mintern Bros. imp.

Turdus falklandicus.

islands from which it derives its name, where it is supposed to be a resident.

a. ♂ ad. sk.	Falkland Islands.	Antarctic Expedition	[C.].
b. Ad. sk.	Falkland Islands.	Antarctic Expedition	[C.].
c. Ad. sk.	East Falkland Islands.	Antarctic Expedition	[C.].

40. Turdus flavirostris.

Merula flavirostris, *Swains. Phil. Mag.* 1827, p. 369.
Turdus flavirostris (*Swains.*), *Gray, Gen. B.* i. p. 220 (1847); *Sclater, P. Z. S.* 1859, p. 332; *id. Cat. Amer. B.* p. 2 (1862); *Baird, Rev. Am. B.* i. p. 31 (1864); *Gray, Hand-l. B.* i. p. 257. no. 3748 (1869); *Lawr. Mem. Bost. Soc. N. H.* ii. p. 266 (1870); *id. Bull. U. S. Nat. Mus.* iv. p. 11 (1870); *Sclater & Salvin, P. Z. S.* 1870, p. 550; *Grayson, Pr. Bost. Soc. N. H.* xiv. p. 276 (1871); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 21, pl. iii. fig. 1 (1879).
Turdus rufo-palliatus, *Lafr. Rev. Zool.* 1840, p. 259; *Gray, Gen. B.* i. p. 219 (1847).
Turdus palliatus, *Bp. Consp.* i. p. 272 (1850).

In the *adult male* the general colour of the upper parts is pale slate-grey, slightly suffused with russet on the forehead and crown; lesser, median, and greater wing-coverts chestnut, shading into chestnut-brown on the back and scapulars; lores black; ear-coverts pale slate-grey; no trace of eye-stripe; wings brown; outside webs of quills, innermost secondaries, primary-coverts, and bastard wing-feathers pale slate-grey; tail brown, outside webs of feathers edged with slate-grey. Chin and throat white, each feather with a long fan-shaped dark-brown terminal streak or spot; breast and flanks chestnut, shading into white on the centre of the belly and under tail-coverts; axillaries and under wing-coverts bright chestnut; inner margin of quills pale chestnut-brown. Bill yellow above and below. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary between the sixth and seventh, bastard primary 1·05 to 0·95 inch. Legs, feet, and claws pale. Length of wing 5·0 to 4·7 inches, tail 4·35 to 3·7, culmen 0·96 to 0·9, tarsus 1·31 to 1·3.

The *female* does not differ from the male in the colour of the plumage. *Birds of the year* and *young in first plumage* appear to be unknown.

Swainson's Yellow-legged Thrush appears to be confined to the west coast of Mexico from the entrance of the Gulf of California to the Bay of Tehuantepec. It is common in the Tres-Marias Islands. It is a migratory bird, probably ascending to the table-lands to breed.

a. Ad. sk.	Mexico.	Purchased.

41. Turdus chiguanco

Turdus chiguanco, *D'Orb. et Lafr. Mag. de Zool., Syn. Av.* p. 16 (1837); *D'Orbign. Voy. Amér. mérid.* p. 201, pl. ix. fig. 2 (*circ.* 1840); *Gray, Gen. B.* i. p. 219 (1847); *Sclater, P. Z. S.* 1858,

pp. 450, 550; *id. P. Z. S.* 1859, p. 333; *id. Cat. Amer. B.* p. 5 (1862); *Sclater & Nation, P. Z. S.* 1866, p. 96; *Gray, Hand-l. B.* i. p. 258. no. 3762 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873); *Tacz. P. Z. S.* 1874, p. 503.
Turdus chiguano, *Bp. Consp.* i. p. 275 (1850).

In the *adult male* the general colour of the upper parts is dark olive-brown; lores dark brown; ear-coverts dark olive-brown; no trace of eye-stripe; wings and tail brown, the outer webs of the feathers dark olive-brown. Underparts ashy brown, the feathers of the chin and upper throat with dark streaks down the centres; under tail-coverts brown, with long white centres and obscure white margins; axillaries and under tail-coverts brown, margined with bright chestnut; inner margin of quills pale brown. Bill yellow above and below. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 1·4 to 0·92 inch. Legs, feet, and claws pale. Length of wing 5·5 to 4·65 inches, tail 5·0 to 3·85, culmen 1·12 to 0·95, tarsus 1·6 to 1·45.

The *female* does not differ from the male. *Birds of the year* and *young in first plumage* appear to be unknown.

D'Orbigny's Yellow-legged Thrush is found on the west coast of South America, having been obtained in Ecuador, Peru, and Bolivia. It winters in the plains from June to October, and ascends to the plateaus of the Andes to breed.

a. ♀ ad. sk. Arequipa, Peru, June 13, 1867. Mr. Henry Whitely [C.].
b. ♀ ad. sk. Islay, Peru, May 15, 1867. Mr. Henry Whitely [C.].

42. Turdus tephronotus.

Turdus tephronotus, *Cab. Journ. Orn.* 1878, p. 218, pl. iii. fig. 2; *Fischer & Reichenow, Journ. Orn.* 1878, p. 268; *Fischer, Journ. Orn.* 1879, p. 279.

In the *adult male* the general colour of the upper parts is palish slate-grey, browner on the inner webs of the quills and tail-feathers; lores brown; ear-coverts brown with pale shafts; no trace of eye-stripe. Chin, cheeks, and upper throat nearly white, with longitudinal dark-brown streaks; lower throat and upper breast palish slate-grey, shading into bright orange-chestnut on the axillaries, under wing-coverts, and the rest of the underparts; inner margin of quills orange-chestnut, broad, almost Geocichline. Bill orange-yellow; a bare place behind the eye. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the seventh and eighth, bastard primary 0.9 to 0·8 inch. Legs, feet, and claws pale brown. Length of wing 4·5 to 4·1 inches, tail 3·3 to 3·15, culmen 0·9 to 0·85, tarsus 1·2.

It is not known that the *sexes* differ in colour. *Birds of the year* are unknown. *Young in first plumage* have the slate-grey

replaced by brown, and have dark bars across the ends of the smaller feathers, and ochraceous spots at the tips of the wing-coverts.

The Zanzibar Thrush has only been procured in the district whose name it bears.

The British Museum does not possess an example of this well-marked species. The type is in the Berlin Museum, and specimens are also in the collections of Capt. Shelley and of the writer.

43. Turdus olivaceus.

Le Merle olive du Cap de Bonne-Espérance, *Briss. Orn.* ii. p. 294, pl. xxii. fig. 3 (1760); *Montb. Hist. Nat. Ois.* iii. p. 381 (1775).

Turdus olivaceus, *Linn. Syst. Nat.* i. p. 292 (1766); *Gmel. Syst. Nat.* i. p. 810 (1788); *Lath. Ind. Orn.* i. p. 351 (1790); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 273 (1850); *Cab. Mus. Hein.* i. p. 3 (1850); *Layard, B. S. Afr.* p. 128 (1867); *Gurney, Ibis*, 1868, p. 45; *Gray, Hand-l. B.* i. p. 256. no. 3725 (1869); *Sharpe, Cat. Afr. B.* no. 188 (1871); *Gurney, Anderss. B. Dam. Ld.* p. 116 (1872); *Ayres, Ibis*, 1876, p. 426; *Barratt, Ibis*, 1876, p. 201; *Sharpe, ed. Layard's B. S. Afr.* p. 200 (1876).

Olive Thrush, *Lath. Gen. Syn.* ii. p. 66 (1783).

In the *adult male* the general colour of the upper parts is dull olive-brown, shading into russet-brown on the forehead, somewhat darker and browner on the inner webs of the quills and tail-feathers; lores and ear-coverts brown; no trace of eye-stripe. Chin and upper throat white, with longitudinal dark-brown streaks, which become almost confluent on the cheeks; breast greyish brown, shading into bright orange-chestnut on the flanks and belly; under tail-coverts brown, with white centres running out to the tips; axillaries and under wing-coverts bright buffish chestnut; inner margin of quills pale chestnut-brown. Bill dusky yellow above and below. Wings with the third, fourth, fifth, and sixth primaries nearly equal and longest, second primary between the seventh and eighth, bastard primary 1·0 to 0·8 inch. Legs, feet, and claws pale. Length of wing 5·05 to 4·45 inches, tail 3·9 to 3·4, culmen 1·0 to 0·9, tarsus 1·4 to 1·2.

There appears to be no difference in the plumage of the *sexes*, nor does any change worthy of note take place by abrasion. *Birds of the year* have the wing-coverts tipped with chestnut, and most of the feathers of the upper and under parts with obscure black terminal bars. *Young in first plumage* have the usual ochraceous shaft-lines to the feathers of the upper parts, and black terminal bars to those of the underparts.

The Olive Thrush is found in the Transvaal, Natal, and in the Cape Colony, where it is a resident.

a. Juv. sk.	S. Africa (*C. J. Andersson*).	R. B. Sharpe, Esq.
b. Ad., *c*. Imm. sk.	S. Africa (*E. L. Layard*).	R. B. Sharpe, Esq.
d. Ad. sk.	S. Africa.	J. Rocke, Esq. [P.].
e. Ad. sk.	Orange River.	R. B. Sharpe, Esq.
f, *g*. Ad. sk.	Knysna (*C. J. Andersson*).	R. B. Sharpe, Esq.
h. Ad. sk.	Kingwilliamstown.	Lieut. Trevelyan [P.].

i. ♂ ad. sk.	Eland's Post (*T. C. Atmore*).	R. B. Sharpe, Esq.
k. Ad. sk.	Lydenburg.	F. A. Barratt, Esq. [C.].
l,m. ♂, *n.* ♀ sk.	Macamac.	F. A. Barratt, Esq. [C.].
o. ♀ ad. sk.	Macamac, July 3, 1874 (*T. Ayres*).	J. H. Gurney, Esq. [P.].

44. Turdus abyssinicus.

Le Merle brun d'Abyssinie, *Briss. Orn.* iii. p. 406 (1760); *Montb. Hist. Nat. Ois.* iii. p. 407 (1775).
Abyssinian Thrush, *Lath. Gen. Syn.* ii. p. 78 (1783).
Turdus abyssinicus, *Gmel. Syst. Nat.* i. p. 824 (1788); *Lath. Ind. Orn* i. p. 357 (1790).
Merula olivacea (*Linn.*), *apud Rüpp. Neue Wirb., Vög.* p. 83 (1835), *apud Rüpp. Syst. Uebers.* p. 60 (1845).
Turdus olivacinus, *Bp. Consp.* i. p. 273 (1850); *Gray, Hand-l. B.* i. p. 256. no. 3731 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 382 (1869); *Blanf. Geol. & Zool. Abyss.* p. 357 (1870); *Heugl. Journ. Orn.* 1871, p. 206.
Turdus olivaceus, *Linn.*, *apud Heugl. Syst. Uebers.* p. 29 (1856), *apud Heugl. Journ. Orn.* 1862, p. 294.
Turdus olivaceus habessinicus, *Heugl. Orn. N.O.-Afr.* i. p. 382 (1869).
Turdus erythrorhynchus, *Rüpp.*, *fide Heugl. Journ. Orn.* 1871, p. 207.
Cichloides olivacinus (*Bp.*), *Gray, fide Giebel, Thes. Orn.* iii. p. 717 (1877).

This is a northern form of *T. olivaceus*, and differs from that species in having the ground-colour of the chin and throat the same colour as the breast. In all other respects (colour of soft parts, wing-formula, &c.) no difference is observable. Length of wing 4·65 to 4·3 inches, tail 3·9 to 3·35, culmen 0·9 to 0·81, tarsus 1·4 to 1·25.

The *female* does not differ from the male. *Birds of the year* and *young in first plumage* very closely resemble birds of the preceding species in similar plumages.

The Abyssinian Thrush is confined to the highlands of Abyssinia, where it is said to be a resident.

a. Juv. sk.	Abyssinia.	Purchased.
b. ♂ ad. sk.	Lake Ashangi, May 1, 1868.	W. T. Blanford, Esq. [C.].
c. ♀ ad. sk.	Senafé, March 10, 1868.	W. T. Blanford, Esq. [C.].
d,e. ♂ ♀ ad. sk.	Euphane, Shoa, December 1841 (*Sir W. C. Harris*).	India Museum.
f. ♂ juv. sk.	Angollála, January 1842 (*Sir W. C. Harris*).	India Museum.

45. Turdus cabanisi.

Variété du Griveron, *Levaill. Ois. d'Afr.* iii. p. 15, pl. c (1802).
Merula obscura, *Smith, Rep. S.-Afr. Exp., App.* p. 45 (1836, *nec Gmelin*).
Turdus obscurus (*Smith*), *Smith, Ill. Zool. S. Afr., Birds*, pl. xxxvi.

(1839); *Gray, Gen. B.* i. p. 219 (1847); *Sundev. K. Sv. Vet.-Ak. Handl.* 1857, p. 35; *Layard, B. S. Afr.* p. 128 (1867).
Turdus cabanisi, *Bp., fide Cab. Mus. Hein.* i. p. 3 (1850).
Turdus smithi, *Bp. Consp.* i. p. 274 (1850); *Gray, Hand-l. B.* i. p. 256. no. 3733 (1869).
Planesticus cabanisi (*Cab.*), *Bp. Compt. Rend.* xxxviii. p. 4 (1854).
Turdus deckeni, *Cab. Journ. Orn.* 1868, p. 412; *id. Decken's Reis. in Ostafr.* iii. p. 21, pl. 1 (1869); *Gray, Hand-l. B.* i. p. 257. no. 3736 (1869); *Finsch & Hartl. Vög. Ostafr.* p. 279 (1870); *Gurney, Ibis*, 1871, p. 267.
Turdus olivaceus, *Linn., apud Ayres, Ibis*, 1869, p. 292, *apud Sharpe, ed. Layard's B. S. Afr.* p. 200 (1876, *partim*).
Cichloides smithi (*Bp.*), *Gray, fide Giebel, Thes. Orn.* iii. p. 707 (1877).

This species is somewhat intermediate between *T. olivaceus* and *T. pelios*. General colour of the upper parts an almost neutral brown, with a slight shade of slate-grey. Chin, cheeks, and upper throat pale grey, somewhat obscurely streaked with brown; lower throat, upper breast, and flanks an almost neutral brown, shading into dull orange-chestnut on the belly; under tail-coverts brown, with pale shaft-lines and tips; axillaries and under wing-coverts bright orange-chestnut; inner margin of quills pale chestnut-brown. Bill yellow. Wings with the fourth and fifth primaries nearly equal and longest, second primary intermediate in length between the seventh and eighth, bastard primary 1·0 to 0·9 inch. Legs, feet, and claws pale brownish yellow. Length of wing 4·9 to 4·55 inches, tail 4·1 to 3·7, culmen 1·08 to 1·0, tarsus 1·39 to 1·25; outside tail-feathers 0·3 to 0·4 inch shorter than the longest.

There appears to be no difference in colour between the *sexes*, but *females* are on an average smaller in size. *Birds of the year* scarcely differ from adults. *Young in first plumage* (February) are much browner, with no trace of slate-grey, and have dark bars at the tips of most of the small feathers and ochraceous tips to the wing-coverts. One example has distinct scutellations on the tarsus.

Cabanis's Thrush is found in the Transvaal and Kaffirland. An example obtained by Baron Von der Decken, probably further north in East Africa, is somewhat browner above and more chestnut on the flanks, and may prove to be distinct.

a. Ad. sk.	Transvaal (*T. Ayres*).	R. B. Sharpe, Esq.
b. ♂ ad. sk.	Potchefstroom, Transvaal, Jan. 15, 1878 (*T. Ayres*).	J. H. Gurney, Esq. [P.].
c. Ad. sk.	Lake Ngami (*Chapman*).	R. B. Sharpe, Esq.

46. Turdus libonyanus.

Merula libonyana, *Smith, Rep. S.-Afr. Exp., App.* p. 45 (1836).
Turdus libonyanus (*Smith*), *Smith, Ill. Zool. S. Afr., Birds*, pl. xxxviii. (1839); *Gray, Gen. B.* i. p. 219 (1847); *Layard, B. S. Afr.* p. 127 (1867); *Newton, Ibis*, 1868, p. 206; *Gray, Hand-l. B.* i. p. 256. no. 3727 (1869); *Finsch & Hartl. Vög. Ostafr.* p. 280 (1870); *Sharpe, Cat. Afr. B.* p. 21 (1871); *Gurney, Anderss. B. Dam. Ld.*

p. 115 (1872); *Sharpe, ed. Layard's B. S. Afr.* p. 199 (1876); *Reichenow, Journ. Orn.* 1877, p. 30; *Ayres, Ibis*, 1879, p. 389.
Turdus verreauxii, *Bocage, Jorn. Sc. Lisb.* ii. p. 340 (1870); *Sharpe, ed. Layard's B. S. Afr.* p. 202 (1876).

In the *adult male* the general colour of the upper parts is pale slate-grey, very slightly browner and darker on the inner webs of the quills and tail-feathers; lores brown; ear-coverts brown, with pale shafts; eye-stripe somewhat obscure, pale buff, soon losing itself behind the eye; outer tail-feathers with obscure pale tips. Breast buff, shading into white on the chin, centre of belly, and under tail-coverts, and into buffish chestnut on the flanks; cheeks pale buff; upper throat with conspicuous very dark-brown streaks, principally at the sides; axillaries and under wing-coverts bright buffish chestnut; inner margin of quills buff, very broad, almost Geocichline. Bill orange-yellow above and below. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 1·05 to 0·8 inch. Legs, feet, and claws pale brownish yellow. Length of wing 4·92 to 4·0 inches, tail 4·05 to 3·4, culmen 0·96 to 0·88, tarsus 1·34 to 1·16.

Females are smaller than males, but do not differ in colour. *Birds of the year* and *young in first plumage* have the usual markings, as the bird named by Bocage is an immature example.

The Kurichane Thrush has been obtained on the Loanga coast, in Angola, Damara Land, the Bechuanas country, the Transvaal, and in the valley of the Zambesi. Nothing is known of its migrations.

Examples from Angola are intermediate in the colour of the upper parts between *T. libonyanus* and *T. tephronotus*, and may prove to be a distinct species, in which case they will stand as *T. verreauxi*.

a. Ad. sk.	South Africa.	Sir A. Smith [C.]. (Type of *Merula libonyana*, Smith.)
b. Ad. sk.	Upper Matabele country.	Dr. Bradshaw [C.].
c. Ad. sk.	Tete, Zambesi.	Dr. Kirk [C.].
d. ♀ ad. sk.	Ombongo, Damara Land, July 8, 1859 (*C. J. Andersson*).	R. B. Sharpe, Esq.
e. Ad. sk.	Rustenberg, Transvaal, June 20, 1878 (*T. Ayres*).	H. Seebohm, Esq. [P.].

47. Turdus pelios*.

Turdus pelios, *Bp. Consp.* i. p. 273 (1850); *id. Compt. Rend.* xxxviii. p. 5 (1854); *Hartl. Orn. W.-Afr.* p. 75 (1857); *id. Journ. Orn.* 1861, p. 162; *Finsch, Journ. Orn.* 1863, p. 36; *Sharpe, Ibis*, 1869, p. 187; *Heugl. Orn. N.O.-Afr.* i. p. 383, pl. xiv. fig. 1 (1869); *Gray, Hand-l. B.* i. p. 256, no. 3726 (1869); *Sharpe, Cat. Afr. B.* p. 21 (1871); *Reichenow, Journ. Orn.* 1875, p. 47.

* I have examined Bonaparte's type in the museum at Leyden, and am convinced that it is the African species. The upper parts are greyish brown, not olive-brown. The tail is 3·5 inches long, and the second primary is equal to the seventh. Bonaparte described it as a Central-Asian species; but it is labelled "India." There can be little doubt that it is an African skin.

Turdus icterorhynchus, *Pr. Würt., fide Heugl. Orn. N.O.-Afr.* p. 383 (1869); *Cab. Journ. Orn.* 1870, p. 238.

In the *adult male* the general colour of the upper parts is an almost uniform dull olive-brown, slightly darker and browner on the inner webs of the quills and tail-feathers; lores brown; ear-coverts brown, with pale shafts; no trace of eye-stripe. Chin, cheeks, and upper throat greyish white, more or less obscurely streaked with brown: lower throat and upper breast pale buffish brown, shading into creamy white on the centre of the belly and under tail-coverts, and into pale buffish chestnut on the flanks; axillaries and under wing-coverts bright buff-chestnut; inner margin of quills pale chestnut-brown. Bill bright yellow above and below. Wings with third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 1·0 to 0·65 inch. Legs, feet, and claws pale. Length of wing 4·4 to 4·0 inches, tail 3·5 to 3·0, culmen 0·9 to 0·85, tarsus 1·35 to 1·2.

It is not known that the *female* differs from the male. *Young in first plumage* have the wing-coverts tipped with chestnut, and the other small feathers of the upper and under parts with transverse terminal dark-brown bars.

The Æthiopian Thrush is a resident in West Africa, from the Gold Coast to Loanga, and in the lowlands of Abyssinia and the Bogos country.

a, *b*. Ad. sk.	Ashantee.	J. Gould, Esq.
c. Ad. sk.	Mampon, August 1872 (*H. F. Blissett*).	R. B. Sharpe, Esq.
d, *e*. Ad. sk.	Abeokuta (*H. Robin*).	F. Nicholson, Esq. [P.].
f. Ad. sk.	Cameroons.	R. B. Sharpe, Esq.
g. Ad. sk.	Gaboon (*Du Chaillu*).	R. B. Sharpe, Esq.
h. Ad. sk.	Gaboon.	R. B. Sharpe, Esq.
i. Ad. sk.	Ogorré River, Gaboon.	Henry Ansell, Esq. [P.].
k. Juv. sk.	Elobé District, Gaboon.	Henry Ansell, Esq. [P.].
l. Ad. sk.	Eylet, Bogos Land (*Esler*).	R. B. Sharpe, Esq.
m. Ad. sk.	Abyssinia.	Purchased.

48. Turdus chiguancoides.

This species differs from the preceding in being a larger bird, without any buffish chestnut on the flanks, which are pale greyish brown. Length of wing 4·8 to 4·65 inches, tail 3·8 to 3·6, culmen 0·9, tarsus 1·3, bastard primary 0·85. The wing-formula does not differ from that of the preceding species.

It is not known that the male differs from the *female*. *Birds of the year* generally retain some of the ochraceous tips to the wing-coverts. *Young in first plumage* resemble that of the preceding species, but have only traces of buff on the breast and flanks.

The Senegambian Thrush has only been found in the plains of the Gambia, in West Africa, where it is supposed to be a resident.

a. Ad., *b*. Juv. sk.	River Gambia.	R. B. Sharpe, Esq.
c, *d*. Ad. st.	River Gambia.	Governor Rendall [C.].

3. MERULA.

	Type.
Merula, *Leach, Cat. Brit. Mus.* p. 20 (1816)	M. merula.
Cichloides, *Kaup, Natürl. Syst.* p. 153 (1829)	M. atrigularis.
Copsichus, *Kaup, Natürl. Syst.* p. 157 (1829)	M. torquata.
Thoracocincla, *Reich. Nat. Syst.* pl. xliii. (1850)	M. torquata.
Cichloselys, *Bonap. Compt. Rend.* xxxviii. p. 5 (1854)	M. cardis.

Typical species of the genus *Merula* have the plumage of the fully adult male different from that of the female. The females of this genus cannot, unfortunately, be distinguished from the genus *Turdus*, and the plumage of the males closely resembles that of the females until their second autumnal moult has taken place. The fully adult males have usually no spots either on the upper or under parts. The most aberrant species of the genus are *M. nigrescens*, *M. fuscatra*, *M. gigas*, and *M. gigantodes*. These species have been separated by Dr. Sclater as a subgenus, to which he has given the name of *Semimerula*. In this group the colour of the plumage of both sexes is alike. If my view of the question be correct Dr. Sclater's name is a particularly unfortunate one, for not only have the males succeeded in attaining an unspotted adult plumage, as in the genus *Merula*, but the females also; so that a more suitable title for this subgenus would be *Merulissima*. *M. mandarina* is another aberrant species of this genus, showing in all examples which I have seen traces of spots on the chin and upper throat. In other respects it is a very highly developed Thrush, having nearly succeeded in getting rid of the spots on the upper parts of the young in first plumage. *M. cardis*, *M. naumanni*, and *M. fuscata* are also somewhat aberrant, inasmuch as they appear never entirely to lose the spots on the flanks; and in *M. ruficollis* and *M. fuscata* even adult males are found with a few spots on the cheeks. To the same slightly aberrant group also belongs *M. atrigularis*, which generally shows traces of indistinct spots on the flanks. The most aberrant species of all are, however, *M. nigriceps* and *M. reevii*, in which the throat is striated with black. I should have placed these species in the genus *Turdus* had it not been that they are slate-grey birds, nearly allied to *M. flavipes*, with similar brown females. The diagnosis of the genus *Merula* must therefore stand as Thrushes not having a Geocichline wing, with the male markedly different from the female, except in a small group, where both sexes have the plumage unspotted.

In what are called structural characters, and in habits, the genus *Merula* does not appear to differ from that of *Turdus*.

The geographical distribution presents several interesting points of difference. Neither the Æthiopian nor the Nearctic Region contains a single species. The Neotropical Region contains sixteen species, the Australian Region twelve, and the Oriental Region fourteen, in addition to three of the Palæarctic species which reach the Himalayas. The Western Palæarctic Region adds only two species, whilst nine species are contributed by its Eastern portion.

Key to the Species.

a. Upper and under parts uniform black or brown, not slate-grey.
  a'. Legs and feet dark brown.
    a''. Upper and under parts black ..... *merula*, p. 235.
    b''. Upper parts very dark brown; underparts dark brown, with traces of paler streaks on the throat ..... *mandarina*, p. 238.
  b'. Legs and feet yellow.
    c''. Upper and under parts uniform black.
      a'''. Second primary equal to or shorter than the eighth; bastard primary 1·5 to 1·1 inch.
        *a*⁴. Female with the underparts pale russet-brown, shading into chocolate-brown on the under tail-coverts *serrana*, p. 239.
        *b*⁴. Female with the underparts greyish brown ..... *atrosericea*, p. 239.
      b'''. Second primary between the fifth and seventh; bastard primary 0·95 to 0·65 inch.
        *c*⁴. Length of wing 5·1 to 4·8 inches .. *infuscatra*, p. 240.
        *d*⁴. Length of wing 4·65 to 4·25 inches.
          *a*⁵. Male dull black. Female with pale ochraceous brown centres to the under tail-coverts ..... *xanthosceles*, p. 240.
          *b*⁵. Male black, with greenish reflexions. Female with greyish-white centres to the under tail-coverts, running out to the tips ..... *leucops*, p. 241.
        *e*⁴. Length of wing 4·1 to 3·75 inches. Female slightly browner than the male, but without streaks on the throat ..... *samoensis*, p. 242.
    d''. Upper and under parts a nearly uniform brown.
      c'''. Wing 5·6 to 5·3 inches, culmen 0·98 to 0·9 inch. Second primary about equal to the seventh ..... *nigrescens*, p. 242.
      d'''. Wing 5·6 to 5·15 inches, culmen 1·42 to 1·2 inch. Second primary about equal to the eighth ..... *fuscatra*, p. 243.
      e'''. Wing 6·15 to 5·65 inches, culmen 1·3 to 1·1. Second primary about equal to the tenth.
        *f*⁴. General colour greyish brown..... *gigas*, p. 244.
        *g*⁴. General colour rich dark brown.... *gigantodes*, p. 244.
b. Upper and under parts a nearly uniform black or slaty brown, but always with white or grey either on the wing-coverts, shafts and tips of the under tail-coverts, upper back, or breast. Throat not streaked.
  e'. Lower throat white.
    e''. Upper back white..... *albocincta*, p. 245.
    f'. Upper back black..... *torquata*, p. 246.

d'. Lower throat black or brown.
g''. A grey or white patch on the wing.
f'''. White patch confined to two of the greater wing-coverts ..... *aurantia*, p. 247.
g''. Patch on wings pale grey, and extending onto some of the secondaries .... *boulboul*, p. 248.
h''. Wing uniform black. Rest of plumage black or dark brown, except centre of belly and shafts and tips of under tail-coverts ..... *mareensis*, p. 249.
c. Upper parts slate-grey, sometimes black on the head. Axillaries, breast, and flanks slate-grey; or throat white, streaked with black. No spots on the flanks.
e'. Throat not streaked.
i''. Throat and belly nearly the same colour.
h'''. Second primary between the sixth and seventh. Belly dark slate-grey.
h⁴. Nape brown, paler than head and back. Belly brownish ..... *nigropileus*, p. 250.
i⁴. Nape same colour as back, and slightly greyer than head. Belly dull slate-grey ..... *simillima*, p. 251.
i'''. Second primary between the seventh and ninth. Belly dark slate-grey.
k⁴. Upper parts almost black. Length of wing 4·7 inches. Second primary between the seventh and eighth .. *bourdilloni*, p. 251.
l⁴. Upper parts dark slate-grey. Length of wing 4·5 to 4·0 inches. Second primary between the eighth and ninth..... *kinnisi*, p. 252.
k'''. Second primary about equal to the sixth. Belly black, contrasting with the slate-grey flanks ..... *carbonarius*, p. 253.
k''. Throat and breast black. Belly slate-grey ..... *flavipes*, p. 253.
f'. Throat white, streaked with black.
l''. Underparts brownish grey. Tail nearly 4·0 inches..... *reevii*, p. 254.
m''. Underparts slate-grey. Tail under 3·5 inches ..... *nigriceps*, p. 254.
d. Lower back black or uniform chestnut, and head or upper back white, brown, or chestnut.
g'. Underparts below the breast black, or nearly so.
n''. Head dark brown. Neck rich chestnut.. *rufitorques*, p. 255.
o''. Head and neck same colour.
l'''. Under tail-coverts uniform black.
m⁴. Head and neck creamy grey ..... *pritzbueri*, p. 256.
n⁴. Head and neck orange-buff..... *bicolor*, p. 256.
o⁴. Head and neck brownish grey..... *tempesti*, p. 257.
m'''. Under tail-coverts with pale shaft-lines and tips.
p⁴. Head and neck white ..... *albifrons*, p. 258.
q⁴. Head and neck pale brownish grey.. *poliocephala*, p. 258.

h'. Underparts below the breast chestnut.
p''. Head and neck white ..... *albiceps*, p. 259.
q''. Head and neck pale grey..... *castanea*, p. 259.
r''. Head and neck dark grey..... *gouldi*, p. 260.
s''. Head and neck nearly black ..... *kessleri*, p. 261.
e. Back dark or light slate-grey, and chestnut on throat, underwing-coverts, or flanks; or flanks spotted.
i'. Flanks conspicuously spotted.
t''. Back slate-grey ..... *cardis*, p. 261.
u''. Back brown, with more or less chestnut.
n'''. Spots on flanks black ..... *fuscata*, p. 262.
o'''. Spots on flanks chestnut..... *naumanni*, p. 264.
k'. Flanks scarcely spotted, or not at all.
v''. Upper flanks rich orange-chestnut.
p'''. Throat and upper breast lack..... *protomomelæna*, p. 265.
q'''. Upper throat black; lower throat and upper breast brown..... *euryzona*, p. 266.
r'''. Throat and upper breast pale slate-grey *hortulorum*, p. 267.
w''. Flanks greyish.
s'''. Throat and breast black ..... *atrigularis*, p. 267.
t'''. Throat and breast chestnut..... *ruficollis*, p. 269.
u'''. Throat and breast pale slate-grey.... *unicolor*, p. 271.
f. Upper parts olive or russet-brown, and flanks unspotted.
x''. Head and throat black..... *olivatra*, p. 272.
y''. Head and throat brown or grey.
v'''. Breast and flanks same colour.
*r*⁴. Breast and flanks buff or pale brown.
*c*⁵. Back olive-brown ..... *obscura*, p. 273.
*d*⁵. Back russet-brown ..... *pallida*, p. 274.
*s*⁴. Breast and flanks rich orange-chestnut *chrysolaus*, p. 275.
*t*⁴. Breast and flanks dark chestnut-brown.
*e*⁵. Length of wing 4·55 to 4·3 inches. *xanthopus*, p. 276.
*f*⁵. Length of wing 4·22 to 3·85 inches *vinitincta*, p. 277.
w'''. Belly and flanks contrasting in colour with the breast.
*u*⁴. Chin and throat creamy grey ..... *vitiensis*, p. 278.
*v*⁴. Chin and throat dark brown ..... *javanica*, p. 279.

1. Merula merula.

Le Merle, *Briss. Orn.* ii. p. 227 (1760); *Montb. Hist. Nat. Ois.* iii. p. 330 (1775).
Le Merle de France, *Daub. Pl. Enl.* nos. 2 (♂), 555 (♀) (1775).
Turdus merula, *Linn. Syst. Nat.* i. p. 295 (1766); *Scop. Ann.* i. p. 134 (1769); *Lath. Gen. Syn. Suppl.* i. p. 285 (1787); *Gmel. Syst. Nat.* i. p. 831 (1788); *Lath. Ind. Orn.* i. p. 340 (1790); *Bechst. Naturg. Deutschl.* iv. p. 219 (1795); *id. Orn. Taschenb.* i. p. 149 (1802); *Wolf, Taschenb.* i. p. 190 (1810); *Pallas, Zoogr.* ad. ...so-Asiat. i. p. 449 (1811); *Temm. Man. d'Orn.* p. 91 (1815); ♀ ad. st. ...t. baier. Zool. i. p. 172 (1816); *Vieill. N. Dict. d'Hist. Nat.* *w*, *x*, *y*. Juv. st. ...(1818); *Temm. Man. d'Orn.* i. p. 168 (1820); *Naum.* *z*. Juv. st. ...dtschl. ii. p. 326 (1822); *Ménétr. Cat. Rais. Cauc.* p. 29 *a'*, *b'*, *c'*. ♂ ad. ...Keys. u. Blas. Wirb. Eur. pp. lii, 178 (1840); *Nordm.* ...ny. Russ. mérid. iii. p. 128 (1840); *Werner, Atlas, In-* *d'*. ♂ ad. sk.

sectiv. pl. 16 (1842); *Gray, Gen. B.* i. p. 218 (1847); *Degl. Orn. Eur.* i. p. 456 (1849); *Bp. Consp.* i. p. 274 (1850); *Cab. Mus. Hein.* i. p. 3 (1850); *Licht. Nomencl. Av.* p. 25 (1854); *Schl. Vog. Nederl.* p. 204 (1854); *Sundev. Sv. Fogl.* p. 52 (1858); *Linderm. Vög. Griechenl.* p. 86 (1860); *Newt. List B. Eur. Blasius*, p. 9 (1862); *Newt. Baring-Gould's Iceland*, p. 408 (1863); *Filippi, Viagg. Pers.* p. 347 (1865); *Degl. et Gerbe, Orn. Eur.* i. p. 390 (1867); *Doderl. Avif. Sicil.* p. 105 (1869); *Droste, Vogelw. Borkum*, p. 92 (1869); *Gray, Hand-l. B.* i. p. 255. no. 3697 (1869); *Heugl. Orn. N.O.-Afr.* p. 386 (1869); *Godman, Azores*, p. 23 (1870); *Fritsch, Vög. Eur.* p. 147 (1870); *Salvad. Faun. Ital. Ucc.* p. 76 (1871); *Newt. ed. Yarr. Br. B.* i. p. 280 (1872); *Sharpe & Dresser, B. Eur.* pt. x. (1872); *Harting, Handb. Br. B.* p. 12 (1872); *Shelley, B. Egypt*, p. 66 (1872); *Severtz. Turkest. Jevotn.* p. 64 (1873); *Irby, B. Gibr.* p. 74 (1875); *Dresser, Ibis*, 1875, p. 332; *Blanf. East. Pers.* ii. p. 157 (1876).

Blackbird, *Lath. Gen. Syn.* ii. p. 43 (1783).

Merula nigra, *Leach, Syst. Cat. Mamm. &c. Brit. Mus.* p. 20 (1816); *Forster, Syn. Cat. Br. B.* p. 50 (1817).

Merula merula (*Linn.*), *Boie, Isis*, 1822, p. 552; *Kaup, Natürl. Syst.* p. 137 (1829).

Sylvia merula (*Linn.*), *Savi, Orn. Tosc.* i. p. 205 (1827).

Merula pinetorum, *Brehm, Vög. Deutschl.* p. 372 (1831).

Merula truncorum, *Brehm, op. cit.* p. 373 (1831).

Merula alticeps, *Brehm, op. cit.* p. 373 (1831).

Merula carniolica, *Brehm, op. cit.* p. 374 (1831).

Turdus merula, *var.* syriaca, *Hempr. et Ehrenb. Symb. Phys. Aves*, fol. bb (1833).

Merula vulgaris, *Selby, Brit. Orn.* i. p. 167 (1833); *Gould, B. Eur.* ii. pl. 72 (1837); *Rüpp. Syst. Uebers.* p. 60 (1845); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 214 (1859); *Gould, B. Gr. Br.* ii. pl. 37 (1862); *Loche, Expl. Sci. Algér., Ois.* i. p. 192 (1867); *Scully, Str. F.* 1876, p. 139; *Bogd. B. Cauc.* p. 80 (1879).

Merula major, *Brehm, Naum.* p. 281 (1855).

Turdus menegazzianus, *Perini, Uccelli Veronesi*, p. 56 (1858).

Turdus dactylopterus, *Bp., fide Gray, Hand-l. B.* i. p. 255. no. 3714 (1869).

Turdus merula, *var.* montana, *Savi fide Salvad., Dresser, B. Eur.* pt. x. (1872).

In the *adult male in spring plumage* the general colour of both the upper and under parts is glossy black, slightly browner on the quills. Bill orange-yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest; second primary generally intermediate in length between the sixth and seventh, but occasionally equal to or shorter than the seventh; bastard primary 0·9 to 0·7 inch. Legs, feet, and claws dark brown. Length of wing 5·1 to 4·6 inches, tail 4·5 to 3·8, culmen 1·1 to 0·95, tarsus 1·4 to 1·3.

The *female* differs from the male in having the upper parts a uniform dark olive-brown, produced by a dark slate-grey grou[nd] or less suffused all over with ochraceous. The underpart[s] grey, palest on the chin and throat; most of the feath[ers] throat, and breast, and a few on the flanks, have obs[cure] dark terminal spots; the breast and flanks are slightly ochraceous, a feature which is very prominent in *Iphala*, and almost disappears in very old birds; the axil

p. 257.

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wing-coverts vary from vinous brown in young birds to slaty brown in old birds. In the immature female the bill is brown, but becomes yellow in old birds. *Males of the year* resemble adults, but have the bill black. *Females of the year* are more or less suffused with vinous red, especially on the throat and breast.

The *young in first plumage* have most of the feathers of the upper and under parts with pale shaft-streaks—on the upper parts with obscure dark tips, and on the underparts with conspicuous dark terminal bars; on the lower back, rump, and belly most of the feathers have simply pale edges. In the male the prevailing colours are brown and pale grey, in the female reddish brown and pale chestnut.

The Blackbird, or Black Ouzel, breeds throughout Europe south of the Arctic Circle, in North Africa, the Azores, and eastwards into Persia and Turkestan. At the extreme north of its range it is a summer visitor only; but otherwise it is a resident bird, subject to internal migration only from the hills to the plains in winter. Examples from Turkestan measure 5·46 inches in length of wing, and may prove to be a distinct species.

a. ♂ ad. sk.	Flores, Azores, May 1865 (*F. D. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
b. ♂ ad. sk.	Fayal, Azores, Feb. 1865 (*F. D. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
c. ♀ ad. sk.	Fayal, Azores, June 1865 (*F. D. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
d. ♂ ad. sk.	St. Michaels, Azores, March 1865 (*F. D. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
e. Juv. sk.	St. Michaels, Azores, July 1865 (*F. D. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
f, *g*. ♂ ad. sk.	Orotava, Teneriffe, April 1871 (*F. D. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
h. ♂ ad. sk.	Madeira, June 27, 1871 (*F. D. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
i. ♂ ad. st.	Devonshire.	Col. Montagu [C.].
k. ♂ ad. st.	Berkshire.	Mr. W. Briggs [P.].
l. ♂ ad. st.	England.	Purchased.
m. Imm. st.	Epping.	H. Doubleday, Esq. [P.]
n. ♂ ad. st.	Berkshire. (Partial albino.)	J. Mills, Esq. [P.].
o. ♀ ad. st.	Devonshire. (Partial albino.)	Col. Montagu [C.].
p. ♂ ad. st.	Devonshire. (Partial albino.)	W. Comyns, Esq. [P.].
q. ♂ ad. st.	England. (Partial albino.)	Purchased.
r. Juv. st.	England. (Partial albino.)	Purchased.
s. Ad. st.	Yorkshire. (Semi-albino.)	Mr. R. Leadbeater [P.].
st.	Britain. (Partial albino.)	Linnean Society [P.].
ad. st.	Wiltshire.	Col. Montagu [C.].
♀ ad. st.	Cambridgeshire.	Mr. J. Baker [P.].
w, *x*, *y*. Juv. st.	Cambridgeshire.	Mr. J. Baker [P.].
z. Juv. st.	Surrey.	Purchased.
a', *b'*, *c'*. ♂ ad. sk.	Avington, Hants, Nov. 1873.	R. B. Sharpe, Esq. [P.].
d'. ♂ ad. sk.	Avington, Hants.	Capt. Shelley [P.].

e', *f'*, *g'*. ♂ imm. sk.	Avington, Hants, Nov. 1873.	R. B. Sharpe, Esq. [P.].
h'. ♂ imm. sk.	Avington, Hants, May 1873.	R. B. Sharpe, Esq. [P.].
i', *k'*. ♀ imm. sk.	Avington, Hants, Nov. 1873.	R. B. Sharpe, Esq. [P.].
l'. ♀ ad. sk.	Avington, Nov. 1873.	R. B. Sharpe, Esq. [P.].
m. ♀ ad. sk.	Avington, Hants.	Capt. Shelley [P.].
n'. ♀ ad. sk.	Cookham, Surrey, Feb. 2, 1874.	R. B. Sharpe, Esq. [P.].
o'. ♀ ad. sk.	Mongeron, Paris, Feb. 11, 1875.	R. B. Sharpe, Esq. [P.].
p'. ♀ imm. sk.	Piedmont, Oct. 1872.	Count Salvadori [P.].
q'. ♀ ad. sk.	Tunis (*Fraser*).	Purchased.
r'. Juv. sk.	Tunis (*Fraser*).	Purchased.
s'. ♂ ad. sk.	Mt. Tabor, Palestine.	Canon Tristram [C.].
t'. ♀ ad. sk.	Jericho, Palestine.	Canon Tristram [C.].
u'. ♂ ad. sk.	Shiraz, Persia.	Col. St. John [C.].
v'. Juv. sk.	Shiraz, Persia (5500 feet), June 24, 1872.	W. T. Blanford, Esq. [C.].
w', *x'*. Skeletons.	England (*Daniels*).	Purchased.
y'. Sternum.		Purchased.
z', *a''*, *b''*. Skulls.	Würtemberg.	Dr. A. Günther.
c''–*f''*. Skulls.	England.	Purchased.

2. Merula mandarina.

Turdus sinensis, *Cuv., fide Less. Traité*, p. 408 (1831, *descr. null.*); *Gray, Hand-l. B.* i. p. 255. no. 3703 (1869).
Turdus mandarinus, *Bp. Consp.* i. p. 275 (1850); *Swinhoe, Ibis*, 1860, p. 56; *id. Ibis*, 1861, p. 38; *id. Ibis*, 1870, p. 248.
Merula mandarina (*Bonap.*), *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 196 (1854).
Turdus (Merula) mandarinus (*Bp.*), *Swinh. P. Z. S.* 1863, p. 281.
Merula sinensis (*Cuv.*), *fide Swinhoe, P. Z. S.* 1871, p. 367; *David et Oust. Ois. Chine*, p. 148 (1877).

In the *adult male in spring plumage* the general colour is an almost uniform very dark brown, nearly black; the feathers of the chin and upper throat always show more or less distinct pale edges, and the feathers of the underparts generally show traces of paler margins. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary equal to or slightly shorter than the sixth, bastard primary 1·0 to 0·75 inch. Legs, feet, and claws nearly black. Length of wing 6·2 to 5·5 inches, tail 4·9 to 4·1, culmen 1·02 to 0·96, tarsus 1·5 to 1·35.

The *female* scarcely differs from the male. *Birds of the year* show the paler brown edges to the feathers of the underparts more conspicuously, especially on the chin and upper throat. *Young in plumage* have only obscure traces of the pale centres and dark margins to the small feathers, and pale tips to the large feathers so characteristic of the family, except on the underparts, where they are more conspicuous than usual.

The South-Chinese Ouzel is a resident in South China, from

Sechuen in the east to Shanghai in the west, and southwards as far as the island of Hainan.

a. ♂ ad. sk.	China.	India Museum.
b. Ad. sk.	China (*Verreaux*).	Purchased.
c. ♀ ad. sk.	Amoy, China (*G. Schlegel*).	H. Seebohm, Esq. [P.].
d. Imm. sk.	Amoy, China (*Swinhoe*).	H. Seebohm, Esq. [P.].

3. Merula serrana.

Turdus serranus, *Tsch. Av. Consp., Wiegm. Arch.* x. p. 280 (1844); *Tschudi & Cab. Fauna Peruana, Aves*, p. 186 (1845); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 275 (1850); *Cab. Journ. Orn.* 1854, p. 260; *Sclater, P. Z. S.* 1859, p. 330; *Gray, Hand-l. B.* i. p. 258. no. 3755 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873, *partim*); *Tacz. P. Z. S.* 1874, p. 504.

Turdus atrosericeus (*Lafr.*), *apud Sclater, Cat. Amer. B.* p. 5 (1862, *partim*).

In the *adult male* the plumage of both the upper and under parts is an almost uniform black. Bill bright yellow above and below. Wings with the third, fourth, fifth, and sixth primaries nearly equal and longest, second primary about equal to the eighth, bastard primary 1·5 to 1·1 inch. Legs, feet, and claws pale yellow. Tail with the outside feathers 0·35 inch shorter than the longest. Length of wing 5·0 to 4·56 inches, tail 4·56 to 3·8, culmen 0·92 to 0·9, tarsus 1·5 to 1·1.

In the *female* the upper parts are a rich brown, shading into russet-brown on the upper tail-coverts, and approaching chocolate-brown on the tail. The underparts, including the axillaries, are pale russet-brown, shading into chocolate-brown on the under tail-coverts, and with obscure traces of darker striation on the upper throat. *Young in first plumage* appear to be unknown.

Tschudi's Black Ouzel appears to be confined to the valleys of the sources of the Amazon, having been found in Colombia, south of Bogatá, Ecuador, Peru, and Bolivia.

a. ♂ ad. sk.	Huasampilla, Peru, March 1872.	Mr. Henry Whitely [C.].
b. ♂ ad. sk.	Quito, Ecuador (*Jameson*).	J. Gould, Esq.

4. Merula atrosericea.

Merula atro-sericea, *Lafr. Rev. Zool.* 1848, p. 3.

Turdus atrosericeus (*Lafr.*), *Sclater, P. Z. S.* 1859, p. 136; *id. Cat. Amer. B.* p. 5 (1862, *partim*); *Gray, Hand-l. B.* i. p. 258. no. 3768 (1869).

Turdus xanthosceles, *Jard. apud Lévt. Ois. Trinid.* p. 201 (1866).

Turdus serranus (*Tsch.*), *apud Scl. & Salv. P. Z. S.* 1870, p. 780, *apud Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873, *partim*).

It is not known that the *adult male* of this species differs from that of the preceding.

In the *female* the general colour of the upper parts is olive-brown,

inclining to russet-brown on the wings and tail. The chin and belly are greyish brown; the upper throat is greyish brown, with obscure darker brown striations; the lower throat, breast, and under tail-coverts are darker brown. The axillaries and under wing-coverts are chestnut-brown, and the flanks dark russet-brown.

The Venezuela Ouzel appears to be confined to Venezuela and the extreme north of Colombia, and probably the island of Trinidad.

a. Ad. sk. [Venezuela.] Purchased.

5. Merula infuscatra.

Merlua infuscata, *Lafr. Rev. Zool.* 1844, p. 41.

Turdus infuscatus (*Lafr.*), *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 275 (1850); *Scl. & Salv. Ibis*, 1859, p. 6; *Sclater, P. Z. S.* 1859, pp. 334, 362, 370; *Baird, Rev. Am. B.* i. p. 31 (1864); *Sumichrast, Mem. Bost. Soc. N. H.* i. p. 543 (1869); *Gray, Hand-l. B.* i. p. 258. no. 3769 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873); *Salv. & Godm. Biol. Centr.-Amer., Zool., Aves*, i. p. 24 (1879).

In the *adult male* the general colour of both the upper and under parts is an almost uniform black. Bill bright yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary between the sixth and seventh, bastard primary 0·95 to 0·65 inch. Legs, feet and claws yellow. Length of wing 5·1 to 4·8 inches, tail 3·9 to 3·6, culmen 0·9 to 0·8, tarsus 1·22 to 1·16.

In the *female* the upper parts are russet-brown, inclining to olive. The underparts are paler, with obscure streaks on the throat, and pale shafts to the under tail-coverts; the axillaries and under wing-coverts are dull orange-chestnut, and the breast, flanks, and under tail-coverts are buffish brown. *Young in first plumage* have the general colour of the upper parts brown, with ochraceous shafts to the scapulars, and ochraceous tips to the wing-coverts; the underparts are more ochraceous, especially on the breast, axillaries, and under wing-coverts; the feathers on the breast have obscure black tips; the bill and feet are brown.

The Guatemalan Black Ouzel has only been found in South Mexico and Guatemala, where it is supposed to be a resident.

a. Ad. sk. Guatemala. J. Gould, Esq.

6. Merula xanthosceles.

Turdus xanthosceles, *Jard.** *Ann. Nat. Hist.* 1847, p. 329; *id. Contr. Orn.* 1847, p. 14, pl. 1; *Bp. Consp.* i. p. 275 (1850); *Sclater, P. Z. S.* 1859, p. 334; *id. Cat. Amer. B.* p. 5 (1862).

Turdus serranus, *Tschudi, apud Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873, *partim*).

This Ouzel is very distinct from *M. serrana*, but is very nearly allied to *M. leucops*, of which it may be considered to

* Spelt *xanthoscelus*.

be an island form. It differs from the latter species in having a somewhat wider bill. The colour of the male is a duller black without the greenish reflections. The colour of the upper parts of the female is a paler olive-brown, especially on the head. The chin and upper throat, unlike those of the female of *M. leucops*, are almost concolorous with the breast and belly, as are also the centre of the belly and the under tail-coverts, the latter having only obscure pale ochraceous-brown centres, in strong contrast to the greyish-white centres and tips to the same feathers of the nearly allied species of the mainland. Bill yellow above and below. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·9 to 0·85 inch. Legs, feet, and claws yellow. Length of wing 4·5 to 4·3 inches, tail 3·5, culmen 0·8 to 0·7, tarsus 1·05.

So far as is known, the Tobago Ouzel is confined to the island of Tobago, where it is supposed to be a resident.

a. Ad. sk. Tobago (*Kirk*). Sir W. Jardine [P.].

7. Merula leucops.

Turdus atrosericeus (*Lafr.*), *apud Sclater, Cat. Amer. B.* p. 5 (1862, *partim*).
Turdus serranus, *Tsch., apud Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873, *partim*).
Turdus leucops, *Tacz. P. Z. S.* 1877, p. 331; *id. P. Z. S.* 1879, p. 221.
Turdus brunneus, *Lawrence, Ibis*, 1878, p. 57, pl. 1 (♀).

This species has frequently been confounded with *M. serrana*, but differs from it in its smaller size, in its comparatively shorter tail, in its smaller bastard primary, in its shorter tarsus, in its more pointed wing, in the general colour of the male being more glossy, with distincter greenish reflections, and in the different coloration of the chin, upper throat, and under tail-coverts of the female.

Adult male entirely black, with greenish reflections. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·9 to 0·8 inch. Legs, feet, and claws pale brown. Length of wing 4·65 to 4·25 inches, tail 3·5 to 3·3, culmen 0·85 to 0·75, tarsus 1·06 to 0·95.

In the *female* the general colour of the upper parts is darkish olive-brown, darkest on the head and palest on the rump; lores brown, ear-coverts olive-brown; no trace of eye-stripe; wings and tail brown; innermost secondaries olive-brown. Chin and upper throat pale olive-brown, each feather with a dark-brown streak along the shafts; remainder of underparts plain olive-brown, shading into greyish white on the centre of the belly; under tail-coverts brown, with greyish-white centres running out to the tip; axillaries and under wing-coverts pale chestnut; inner margins of quills pale chestnut-brown. *Birds of the year* and *young in first plumage* appear to be unknown.

Taczanowsky's Black Ouzel has been found on both slopes of the Andes of Ecuador, and in the valley of the Upper Amazon, both in Ecuador and Northern Peru.

a. ♀ ad. sk.	Chamicuros, Peruvian Amazons, Sept. 21, 1868.	E. Bartlett, Esq. [C.].
b. ♂ juv. sk.	Quito, Ecuador (*Jameson*).	J. Gould, Esq.

8. Merula samoensis.

Turdus vanicorensis, *Quoy et Gaim., apud Peale, U.S. Expl. Exp.* 1848, p. 95, *apud Hartl. Wiegm. Arch.* p. 99 (1852), *apud Sclater, Ibis*, 1861, p. 281 (*partim*).
Merula vanicorensis (*Quoy et Gaim.*), *apud Cassin, U.S. Expl. Exp.* 1858, p. 158, *apud Finsch & Hartl. Beitr. Faun. Centralpolynes.* p. 97 (1867), *apud E. P. Ramsay, Pr. Linn. Soc. N. S. Wales*, iii. p. 337 (1879).
Turdus (Merula) vanicorensis (*Quoy et Gaim.*), *apud Gray, B. Trop. Isl.* p. 16 (1859, *partim*).
Turdus vanikorensis (*Quoy et Gaim.*), *apud Gray, Hand-l. B.* i. p. 255. no. 3710 (1869, *partim*).
Turdus samoensis, *Tristram, Ibis*, 1879, p. 188.

The *adult male* is uniform dull black above and below. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary intermediate in length between the fifth and sixth, or sixth and seventh; bastard primary 0·8 to 0·7 inch. Legs, feet, and claws pale yellow. Length of wing 4·1 to 3·75 inches, tail 2·85 to 2·5, culmen 0·91 to 0·82, tarsus 1·35 to 1·24.

It is not known that the *female* differs from the male. Towards the end of the breeding-season the black of both the upper and under parts fades to a dull brown. The plumage of the *young* is unknown.

The Samoan Ouzel appears to be confined to the Samoa Islands.

a. Ad. sk.	Samoa Islands.	Godeffroy Museum.
b, *c*, *d*. Ad. sk.	Samoa Islands.	Rev. S. J. Whitmee [C.].
e. Ad. sk.	Samoa Islands.	Rev. J. B. Stair [P.].

9. Merula nigrescens.

Turdus nigrescens, *Cab. Journ. Orn.* 1860, p. 324; *Lawr. Ann. Lyc. N. York*, ix. p. 91 (1864); *Frantzius, Journ. Orn.* 1869, p. 290; *Gray, Hand-l. B.* i. p. 258. no. 3763 (1869); *Salvin, P. Z. S.* 1870, p. 180; *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 25, pl. iv. (1879).

In the *adult male* the general colour of the upper parts is dark brown; wings, wing-coverts, innermost secondaries, and tail black. The whole of the underparts, without exception, are an almost uniform dark brown. Bill bright yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 1·3 to 1·1 inch. Legs, feet, and claws yellow. Tail with the outside feathers 0·1 to 0·3

inch shorter than the longest. Length of wing 5·6 to 5·3 inches, tail 4·9 to 4·5, culmen 0·98 to 0·9, tarsus 1·5 to 1·43.

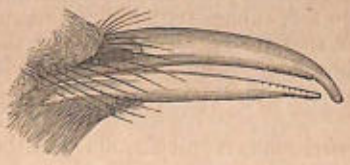
The *female* is slightly paler than the male. *Birds in abraded summer plumage* are not quite so dark a brown as newly moulted autumn birds. *Young in first plumage* have the usual ochraceous markings and spots on the upper parts; whilst most of the feather of the underparts are dull ochraceous, with fan-shaped black terminal spots; the axillaries and under wing-coverts are also obscurely margined with ochraceous, and the bill and feet are brown.

Cabanis's Brown Ouzel has only been obtained in South Costa Rica and West Panama, where it is believed to be a resident.

a. ♀ ad. sk.	Volcan de Cartago, Costa Rica (*E. Arcé*).	Osbert Salvin, Esq.

10. Merula fuscatra.

Turdus fuscater, *D'Orb. et Lafr. Mag. de Zool., Syn. Av.* 1837, p. 16; *D'Orb. Voy. Amér. mérid.* p. 200, pl. ix. fig. 1 (*circ.* 1840); *Fraser, P. Z. S.* 1843, p. 120; *Tschudi & Cab. Faun. Peruan., Aves*, p. 186 (1845); *Gay, Faun. Chil. Zool.* i. p. 331 (1847); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 275 (1850); *Sclater, P. Z. S.* 1859, p. 332; *id. Cat. Amer. B.* p. 5 (1862); *Gray, Hand-l. B.* i. p. 258. no. 3761 (1869); *Sel. & Salv. Nomencl. Av. Neotr.* p. 2 (1873); *Martens, Journ. Orn.* 1875, p. 443.
Turdus anthracinus, *Burmeister, Journ. Orn.* 1858, p. 159.



Bill of *Merula fuscatra*.

In the *adult male* the plumage of both the upper and under parts is a nearly uniform dark sooty brown. Bill bright yellow above and below. Wings with the fourth and fifth primaries nearly equal and longest, second primary about equal to the eighth, bastard primary 1·5 to 1·0 inch. Legs, feet, and claws pale yellow. Tail with the outside feathers 0·4 inch shorter than the longest. Length of wing 5·6 to 5·15 inches, tail 5·2 to 4·75, culmen 1·42 to 1·2, tarsus 1·75 to 1·45.

The *female* is slightly paler and more olive than the male.

D'Orbigny's Brown Ouzel breeds in the Andes of Peru and Bolivia, and is found southwards as far as Mendoza in the Argentine Republic and Chili.

a. Ad. sk.	Chili.	Mr. Brydges [C.].
b. Ad.; *c*. Juv. sk.	Mendoza.	E. C. Reed, Esq. [C.].
d. Ad. sk.	Mendoza.	Zoological Society.

Merula gigas and Merula gigantodes.

This Ouzel has two extreme forms, which appear to be connected by a complete series of examples in every intermediate stage of colour. The synonymy of the Northern form is as follows:—

11. Merula gigas.

Turdus gigas, *Fraser*, *P. Z. S.* 1840, p. 59; *Gray*, *Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 275 (1850); *Licht. Nomencl. Av.* p. 26 (1854); *Sclater*, *P. Z. S.* 1855, p. 144; *id. P. Z. S.* 1858, pp. 451, 550; *id. P. Z. S.* 1859, p. 332; *id. Cat. Amer. B.* p. 5 (1862); *Scl. & Salv. Ex. Orn.* p. 139, pl. lxx. (1868); *Gray*, *Hand-l. B.* i. p. 258. no. 3760 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873); *id. P. Z. S.* 1875, p. 234; *Salv. & Godm. Ibis*, 1879, p. 198.

In the *adult male* the colour of the upper parts is an almost neutral dark brown, slightly suffused with olive on the back, rump, and upper tail-coverts. Underparts greyish brown, darkest on the throat and under tail-coverts, and occasionally slightly suffused with ferruginous on the axillaries. Bill bright yellow above and below. Wings with the fourth and fifth primaries nearly equal and longest, second primary about equal to the tenth, bastard primary 2·0 to 1·4 inch. Tail with the outside feathers 0·6 to 0·4 inch shorter than the longest. Length of wing 6·15 to 5·65 inches, tail 5·8 to 5·2, culmen 1·3 to 1·05, tarsus 1·85 to 1·68. Legs, feet, and claws yellow.

It is not known that there is any difference in the colour of the plumage of the *sexes*. *Birds of the year*, which have not quite lost their first plumage, have dark-brown terminal bars and pale-brown subterminal bars across the feathers of the throat and breast. *Young in first plumage* appear to be unknown.

The typical form of the Great Brown Ouzel is found in New Granada. Intermediate forms appear in Colombia and Ecuador.

a. Ad. sk.	Bogotá, New Granada.	Purchased.
b. Ad. st.	Bogotá.	Purchased.
c. ♂ ad. sk.	Santa Elena, U.S. Colombia.	T. K. Salmon, Esq. [C.].
d. Ad. sk.	Ecuador (*Fraser*).	Eyton Collection.

The synonymy of the Southern form is as follows:—

12. Merula gigantodes.

Turdus gigantodes, *Cab. Journ. Orn.* 1873, p. 315; *Tacz. P. Z. S.* 1874, p. 503; *Scl. & Salvin*, *P. Z. S.* 1874, p. 677.

This differs from the typical form in being much darker and browner. The head, wings, and tail are almost black; the back, rump, and upper tail-coverts, throat and under tail-coverts are dark rich brown, slightly paler on the breast, belly, and flanks. Bill deep yellow. Wing-formula as in the preceding species; bastard primary 1·8 inch. Length of wing 5·8 inches, tail 5·5, culmen 1·28, tarsus 1·6.

The *female* is supposed to resemble the male. *Birds of the year* and *young in first plumage* appear to be unknown.

The dark form of the Great Brown Ouzel is found in Peru and Bolivia.

The British Museum does not possess a skin of this form, but examples are in Dr. Sclater's collection and in my own.

13. Merula albocincta.

Turdus albocinctus, *Royle, Illustr. Himal. Bot.* p. lxxvii, pl. viii. fig. 3 (1839); *Gray, Hand-l. B.* i. p. 255. no. 3704 (1869).

Turdus albicollis, *Royle, loc. cit.* (1839); *Gray, Gen. B.* i. p. 219 (1847).

Turdus collaris, *Soret, Rev. Zool.* 1840, p. 2.

Merula nivicollis, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 155. nos. 182, 183, pl. 156. nos. 182, 183, *undè Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Merula albocincta (*Royle*), *Blyth, J. A. S. Beng.* xvi. p. 148 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 162 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 197 (1854); *Gould, B. Asia*, ii. pl. 76 (1859); *Jerd. B. Ind.* i. p. 526 (1862); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 42 (1863); *Blanf. J. A. S. Beng.* xli. pt. 2, p. 49 (1872); *Godw.-Aust. J. A. S. Beng.* xlv. pt. 2, p. 196 (1876); *Scully, Stray Feath.* viii. p. 285 (1879).

Turdus albicinctus (*Royle*), *Bp. Consp.* i. p. 274 (1850).

In the *adult male in spring plumage* the general colour of the upper parts is a rich glossy black, shading into brown on the forehead, and abruptly interrupted on the neck with a nearly white collar, which extends completely round the neck, and is more or less streaked with dark brown between the cheeks, leaving the rest of the underparts a dark sooty brown; under tail-coverts occasionally a uniform dark brown, but generally having white tips and shafts. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary equal to or slightly shorter than the sixth, bastard primary 1·15 to 0·85 inch. Legs, feet, and claws pale yellow. Length of wing 5·8 to 5·1 inches, tail 4·55 to 4·0, culmen 1·15 to 1·03, tarsus 1·4 to 1·26.

The *female* differs from the male in having the white collar pale grey on the hind neck, the general colour of the upper parts brown, and of the underparts brown obscurely barred with grey. The *immature male* resembles the female, but has the collar whiter. *Birds of the year* and *young in first plumage* appear to be unknown.

The White-collared Ouzel appears to be confined to the Himalayas from Nepal to Assam, breeding at high elevations and descending lower in the valleys in winter.

a. ♂ ad. sk.	Bengal (*Royle*).	India Museum. (Type of *Turdus albocinctus*, Royle.)
b, c. ♂ ♀ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
d. ♂ ad. sk.	Simla.	Capt. Stackhouse Pinwill [P.].

e, f. ♂ ♀ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.]. (Types of *Merula nivicollis*, Hodgs.)
g, h. ♂; *i, k.* ♀ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
l, m. ♂ ♀ ad. sk.	Nepal (*Hodgson*).	India Museum.
n, o. ♂ ♀ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
p. ♀ ad. sk.	Darjiling (*Pearson*).	India Museum.
q. ♀ ad. sk.	Darjiling (*Eccles*).	F. Godman and O. Salvin, Esqrs. [P.].
r. ♂ ad. sk.	India.	Major-Gen. Hardwicke [P.].

14. Merula torquata.

Le Merle à collier, *Briss. Orn.* ii. p. 235 (1760); *Daubent. Pl. Enl.* no. 516 (1775).

Turdus torquatus, *Linn. Syst. Nat.* i. p. 296 (1766); *Scop. Ann.* i. p. 135 (1769); *Lath. Gen. Syn. Suppl.* i. p. 285 (1787); *Gmel. Syst. Nat.* i. p. 832 (1788); *Lath. Ind. Orn.* i. p. 343 (1790); *Bechst. Naturg. Deutschl.* iv. p. 214 (1795); *id. Orn. Taschenb.* i. p. 148 (1802); *Wolf, Taschenb.* i. p. 198 (1810); *Pallas, Zoogr. Rosso-Asiat.* i. p. 451 (1811); *Temm. Man. d'Orn.* p. 90 (1815); *Koch, Syst. baier. Zool.* i. p. 173 (1816); *Temm. Man. d'Orn.* i. p. 166 (1820); *Naum. Vög. Deutschl.* ii. p. 318 (1822); *Ménétr. Cat. Rais. Cauc.* p. 29 (1832); *Keys. u. Blas. Wirb. Eur.* pp. li, 177 (1840); *Nordm. Démid. Voy. Russ. mérid.* ii. p. 127 (1840); *Werner, Atlas, Insectiv.* pl. xv. (1842); *Gray, Gen. B.* i. p. 219 (1847); *Degl. Orn. Eur.* i. p. 458 (1849); *Bp. Consp.* i. p. 274 (1850); *Cab. Mus. Hein.* i. p. 3 (1850); *Schl. Vog. Nederl.* p. 206 (1854); *Licht. Nomencl. Av.* p. 25 (1854); *Sundev. Sv. Fogl.* p. 52 (1856); *Linderm. Vög. Griechenl.* p. 85 (1860); *Newton, List B. Eur. Blasius*, p. 9 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 401 (1867); *Doderl. Avif. Sicil.* p. 106 (1869); *Droste, Vogelw. Borkum*, p. 92 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 386 (1869); *Gray, Hand-l. B.* i. p. 256, no. 3720 (1869); *Fritsch, Vög. Eur.* p. 146 (1870); *Salvad. Faun. Ital. Ucc.* p. 77 (1871); *Newt. ed. Yarr. Brit. B.* i. p. 287 (1872); *Harting, Handb. Br. B.* p. 12 (1872); *Shelley, B. Egypt*, p. 67 (1872); *Sharpe & Dresser, B. Eur.* pt. x. (1872); *Irby, B. Gibr.* p. 74 (1875); *Blanf. East. Pers.* ii. p. 158 (1876).

Le Merle à plastron blanc, *Montb. Hist. Nat. Ois.* iii. p. 340 (1775).

Ring-Ouzel, *Lath. Gen. Syn.* ii. p. 46 (1783).

Merula torquata (*Linn.*), *Boie, Isis*, 1822, p. 552; *Selby, Brit. Orn.* i. p. 109 (1833); *Gould, B. Eur.* ii. pl. 73 (1837); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 216 (1859); *Loche, Expl. Sci. Algér., Ois.* p. 190 (1867); *Gould, B. Gt. Br.* ii. pl. xxxviii. (1873); *Bogd. B. Cauc.* p. 80 (1879).

Sylvia torquata (*Linn.*), *Savi, Orn. Tosc.* i. p. 206 (1827).

Copsichus torquatus (*Linn.*), *Kaup, Natürl. Syst.* p. 157 (1829).

Merula montana, *Brehm, Vög. Deutschl.* p. 375 (1831).

Merula collaris, *Brehm, op. cit.* p. 376 (1831).

Merula alpestris, *Brehm, op. cit.* p. 377 (1831).

Thoracocincla torquata (*Linn.*), *Reich. Nat. Syst.* pl. xliii. (1850).

Merula vociferans, *Brehm, Naum.* 1855, p. 281 (1855).

Merula maculata, *Brehm, loc. cit.* (1855).

In the *adult male in spring plumage* the general colour of the upper and under parts is almost uniform very dark brown, approach-

ing black, except a gorget of nearly white extending across the lower throat from shoulder to shoulder; most of the feathers show traces of pale margins, which are conspicuous on the greater wing-coverts and quills, the belly, and the under tail-coverts; axillaries and under wing-coverts pale greyish brown with nearly white margins; inner margin of quills brown. Bill yellow. Wings with the third and fourth primaries nearly equal and longest, second primary slightly longer than the fifth, bastard primary 0·75 to 0·6 inch. Legs, feet, and claws brown. Length of wing 5·7 to 5·1 inches, tail 4·5 to 4·1, culmen 1·0 to 0·9, tarsus 1·4 to 1·35.

The *female* differs from the male in being dull brown instead of nearly black, and in having the white gorget suffused with brown; bill brown. *After the autumn moult* the pale edges to the feathers are slightly more conspicuous. *Birds of the year* have very broad white edges to the feathers of the underparts; the gorget of the female is scarcely distinguishable and that of the male considerably suffused with brown. *Young in first plumage* have the back and breast barred with black and pale brown, and have ochraceous tips to the wing-coverts.

The Ring-Ouzel breeds in the pine-districts throughout Western Europe, but does not appear to range as far east as the valley of the Volga. It winters in North Africa, Asia Minor, and Persia.

a. ♂ ad. st.	Turnham Green, Middlesex.	J. Baker, Esq. [P.].
b. ♂ ad. st.	Turnham Green, Middlesex.	J. Baker, Esq. [P.].
c. ♀ ad. sk.	Cornwall.	Col. Montagu [P.].
d. Ad. sk.	Longshaw, Derbyshire, July 1854 (*O. Salvin*).	F. Godman and O. Salvin, Esqrs. [P.].
e. Juv. sk.	Tunov, S. Norway, June 27, 1866 (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
f, *g*, *h*. Juv. sk.	South Norway, July 1866 (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
i, *k*. ♂ ad. sk.	Skærstad, Norway, May 14, 1857 (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
l. ♀ ad. sk.	Bodö, Norway, June 2, 1857 (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
m. ♂ ad. sk.	Tangier.	J. E. Harting, Esq. [P.].
n. ♂ ad. sk.	Persia.	
o. Ad. sk.	Europe.	J. Gould, Esq.
p. Skeleton.	England.	Purchased.
q. Skeleton.	Bonn.	Dr. A. Günther.

15. Merula aurantia.

Le Merle de la Jamaïque, *Briss. Orn.* ii. p. 277 (1760).
Le Merle brun de la Jamaïque, *Buff. Hist. Nat. Ois.* iii. p. 391 (1775).
White-chinned Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 45 (1783).
Turdus aurantius, *Gmel. Syst. Nat.* i. p. 832 (1788); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 275 (1850); *Sclater, P. Z. S.* 1859, p. 333; *Sclater, Cat. Amer. B.* p. 6 (1862); *Gray, Hand-l. B.* i. p. 258. no. 3765 (1869).
Turdus leucogenus, *Lath. Ind. Orn.* i. p. 341 (1790); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 254 (1818).
Merula saltator, *Hill, Comp. Jam. Almanack*, 1842, *fide Gosse, B. Jamaica*, p. 140 (1847).

Merula leucogenys (*Lath.*), *Gosse, B. Jamaica*, p. 136, *Ill.* pl. xxiii. (1847).
Catharus aurantius (*Gmel.*), *Bp. Compt. Rend.* xxxviii. p. 3 (1854).
Semimerula aurantia, *Baird, Rev. Am. B.* i. p. 34 (1864).
Mimocichla aurantia (*Gmel.*), *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873).

In the *adult male* the head, lores, and ear-coverts are black; rest of upper parts dark slaty brown, except the outer half of the outer webs of two of the greater wing-coverts next to the innermost secondaries, which are white; wings and tail brown. Chin white; rest of underparts brown, shading to creamy white on the centre of the belly; under tail-coverts dark brown, tipped with white; axillaries and under wing-coverts brown, streaked with white; inner margin of quills pale brown. Bill yellow above and below. Wing with the fourth and fifth primaries nearly equal and longest, second primary about equal to the eighth, bastard primary 1·01 inch. Legs, feet, and claws yellow. Tail with the outside feathers 0·35 inch shorter than the longest. Length of wing 4·95 to 4·5 inches, tail 4·2 to 3·9, culmen 1·13 to 1·03, tarsus 1·6 to 1·5.

The *female* differs from the male in being paler and browner, the head being only slightly darker than the rest of the upper parts. *Birds of the year* and *young in first plumage* appear to be unknown.

The Jamaica Ouzel is confined to the island of Jamaica, where it is a resident.

a. ♀ ad. sk.	Moneague, Jamaica, February 1865.	Dr. Bryant [P.].
b. Ad. sk.	Jamaica.	Philip Gosse, Esq. [C.].
c. Ad. st.	Jamaica.	Philip Gosse, Esq. [C.]. (Type of *Merula saltator*, Hill.)

16. Merula boulboul.

Boulboul Shrike, *Lath. Gen. Syn. Suppl.* i. p. 57 (1787).
Lanius boulboul, *Lath. Ind. Orn.* i. p. 80 (1790); *Stephens, Shaw's Gen. Zool.* vii. pt. 2, p. 308 (1809).
Turdus poecilopterus, *Vigors, P. Z. S.* 1831, p. 54; *Gould, Cent. B. Himal. M.* pl. xiv. (1832); *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pls. 146, 147, *unde Hodgs. Gray's Zool. Misc.* p. 83 (1844); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 81 (1846); *id. Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 274 (1850).
Merula boulboul (*Lath.*), *Blyth, J. A. S. Beng.* xvi. p. 147 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 162 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 196 (1854); *Gould, B. Asia*, ii. pl. 77 (1859); *Jerd. B. Ind.* i. p. 525 (1862); *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 102 (1870); *Hume, Nests & Eggs Ind. B.* p. 234 (1873).
Turdus boulboul (*Lath.*), *Gray, Hand-l. B.* i. p. 255. no. 3700 (1869).

In the *adult male* the general colour of the upper parts is black, with the exception of the tips of the median wing-coverts, the outer webs of the greater wing-coverts, a broad margin to the innermost secondaries, and a narrow margin to the remaining secondaries, which are greyish white. The underparts are browner black, each

feather of the axillaries, under wing-coverts, belly, flanks, and under tail-coverts narrowly margined with greyish white; axillaries and under wing-coverts, sometimes one or both, greyish white. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·25 to 0·85 inch. Legs, feet, and claws deep yellow. Length of wing 5·9 to 5·25 inches, tail 4·65 to 4·1 (females 3·62 to 3·12), culmen 1·1 to 0·9, tarsus 1·41 to 1·27.

The *female* differs from the male in having the black parts replaced by olive-brown and the greyish white on the wings by brownish white. *Birds of the year* scarcely differ from adults, except that in the males the underparts are greyer and the greyish white on the wings is darker, and in the females the brownish white on the wings is russet-brown. *Young in first plumage* resemble adults, but have pale shaft-lines to the feathers of the upper parts and pale centres to the feathers of the underparts.

The Grey-winged Ouzel breeds throughout the Himalayas from Kumaon to Assam, descending into the valleys during the cold season.

a–d. ♂, *e.* ♀ ad. sk.	Cashmere (*Dr. Bellew*).	India Museum.
f, g. ♂ imm. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
h, i. ♂ ♀ ad. sk.	Kumaon (*Strachey*).	India Museum.
k, l. ♂ ad.; *m.* ♀ ad. sk.	Nepal.	B.H. Hodgson, Esq. [P.].
n. ♀ ad.; *o, p.* Imm. sk.	Nepal (*Hodgson*).	India Museum.
q. ♂ ad.; *r.* Juv. sk.	Darjiling (*Pearson*).	India Museum.
s, t. ♂ ♀ juv. sk.	Darjiling.	J. Fotheringham, Esq. [C.].
u. ♂ ad. sk.	Darjiling (*Eccles*).	F. Godman and O. Salvin, Esqrs. [P.].
x. Juv. st.	Himalayas.	J. R. Reeves, Esq. [P.].
y. ♂ ad. st.	Himalayas.	J. Gould, Esq. [P.].
z. Imm. sk.	Darjiling (*Dr. Bellew*).	India Museum.
a', b'. ♂ ♀ sternum.	Nepal.	B.H. Hodgson, Esq. [P.].

17. Merula mareensis.

Merula mareensis (*Lay. et Tristr.*)*.

Turdus vanikorensis, *Quoy et Gaim. Voy. Astrol. Zool.* i. p. 188, pl. vii. fig. 2 (1830); *Gray, B. Trop. Isl.* p. 16 (1859, *partim*); *id. Hand-l. B.* i. p. 255. no. 3713 (1869, *partim*); *Tristram, Ibis*, 1879, p. 188.

Geocichla vanikorensis (*Quoy et Gaim.*), *Bp. Consp.* i. p. 268 (1850).

Turdus mareensis, *Layard & Tristram, Ibis*, 1879, p. 472.

In the *adult male* the general colour of the upper parts is an almost uniform dark brown approaching black, on the back quite black; a very indistinct pale-brown eye-stripe reaching from the back of the black to the nape. Underparts dark brown, shading into nearly white the centre of the belly; under tail-coverts brown, with pale

* The name of *M. vanicorensis* (Quoy et Gaim.) cannot be used for this species, because, in the first place, it has been extensively misapplied to the Samoan species, and, in the second place, because it would be misleading if, as seems probable, this species has never occurred on Vanikoro.

chestnut-brown tips and shafts. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary equal to the sixth, bastard primary 0·7 inch. Legs, feet, and claws pale yellow. Length of wing 4·0 inches (female 3·9), tail 3·0 (female 2·7), culmen 1·2 (female 0·8), tarsus 1·2.

The *female* differs from the male in being very dark brown above instead of black. The underparts are a still paler dark brown, but have the same markings on the centre of the belly and under tail-coverts. *Birds of the year* have traces of ochraceous tips to some of the greater wing-coverts. *Young in first plumage* are unknown.

The Maré Ouzel is confined to the island of that name, one of the Loyalty Islands. It was originally described as coming from the island of Vanikoro; but the localities given for birds obtained on the Voyage of the 'Astrolabe' have been in some cases found to be incorrect, and it may prove to be so in this case. The type in the Museum of the Jardin des Plantes, in Paris, agrees exactly with a female in my collection obtained by Layard on the island of Maré.

a, b. ♂ ♀ ad. sk. Maré, Loyalty group, October 1879. E. L. Layard, Esq. [C.].

18. Merula nigropileus.

Turdus (Merula) nigropileus, *Lafresnaye, Delessert, Voy. de l'Inde*, pt. ii. p. 27 (1843).
Turdus nigropileus (*Lafresn.*), *Jerd. B. Ind.* i. p. 523 (1862).
Merula nigropileus (*Lafresn.*), *Gray, Hand-l. B.* i. p. 255. no. 3701 (1869).

In the *adult male* the head, nape, lores, and the upper part of the ear-coverts are dark brown, nearly black; the hind neck, wings, and tail brown, shading into slate-grey on the back, upper tail-coverts, outer webs of the wing-coverts, innermost secondaries, and margins of the quills and tail-feathers. Chin and upper throat darkish brown, shading into dull vinous brown on the breast and into dull slate-grey on the axillaries, under wing-coverts, belly, flanks, and under tail-coverts, shading into nearly white on the centre of the belly; traces of pale shaft-stripes on the under tail-coverts, sometimes very conspicuous. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·2 to 0·82 inch. Legs, feet, and claws yellow. Length of wing 5·1 to 4·5 inches, tail 4·1 to 3·5, culmen 1·06 to 0·98, tarsus 1·3 to 1·2.

The *female* differs from the male in having the head, nape, and upper back an almost uniform brown, slightly darker on the head; the slate-grey of the rest of the upper parts is slightly duller. On the underparts the dull white on the centre of the belly and under tail-coverts is much more developed, and the throat is brown obscurely streaked with dark brown. *Young in first plumage* appear to be unknown.

The Black-capped Ouzel inhabits South India and some parts of Central India, breeding on the mountains and descending into the plains during the cool season.

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J.G. Keulemans del. Mintern Bros. imp.

Merula bourdillioni.

a. ♂ ad. sk.	Matheran, Bombay, Jan. 23, 1872.	Major Hayes Lloyd [P.].
b. ♂ ad. sk.	Matheran, Feb. 3, 1872.	Major Hayes Lloyd [P.].
c. Ad. sk.	Madras.	Dr. Jerdon [P.].
d, *e*. Ad. sk.	Madras.	Sir W. Elliot [P.].

19. Merula simillima.

Turdus simillimus, *Jerd. Madr. Journ.* x. p. 253 (1839); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 274 (1850); *Gray, Hand-l. B.* i. p. 255. no. 3698 (1869).

Merula simillima (*Jerd.*), *Blyth, Cat. B. Mus. As. Soc.* p. 162 (1849); *Jerd. B. Ind.* i. p. 524 (1862); *Hume, Nests and Eggs Ind. B.* p. 232 (1873).

In the *adult male* the head and lores are dark sooty brown, approaching black, shading into dark ash-grey, which is the general colour of the rest of the upper parts, except the inside webs of the quills and tail-feathers, which are dark sooty brown. Underparts, including the axillaries and under wing-coverts, are almost uniform darkish brown, slightly paler on the belly, and with a few nearly white feathers near the vent. Bill orange. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·15 to 1·0 inch. Legs, feet, and claws yellow. Length of wing 5·1 to 4·7 inches, tail 4·1 to 3·8, culmen 1·1 to 1·0, tarsus 1·38 to 1·3.

The *female* scarcely differs from the male. The *young in first plumage* have pale shaft-streaks and dark transverse terminal bars to the feathers of the head, upper back, and scapulars, and most of the feathers of the underparts are similarly marked.

The Neilgherry Ouzel appears to be confined to the Neilgherry hills in South-west India, where it is supposed to be a resident.

a. Ad. sk.	[Madras*.]	India Museum.
b, *c*. ♂; *d*, *e*. ♀ ad. sk.	[Madras (*Wight*)*.]	India Museum.
f, *g*. ♂ ♀ juv. sk.	[Madras (*Wight*)*.]	India Museum.
h, *i*. ♂ ♀ ad. sk.	Neilgherries.	Dr. Jerdon [P.]. (Types of *Turdus simillimus* (Jerd.)
k. ♂ ad. sk.	Neilgherries.	M. Delessert [E.].
l. Ad. sk.	Neilgherries. (Partial albino.)	India Museum.
m. Ad. st.	[S. India.]	J. Gould, Esq.

20. Merula bourdilloni. (Plate XV.)

Merula kinnisi (*Blyth*), *apud Hume, Stray Feath.* vii. p. 35 (1878).

In the *adult male* the head is black, rest of the upper parts dull black, showing only obscure traces of very dark slate-grey margins to the feathers, which are slightly more conspicuous on the wing-coverts; the underparts are very dark brown, with traces of dark

* It is a pity that the exact localities of these specimens have not been preserved. They are doubtless from the Neilgherry hills, where alone, as yet, the species has been met with.

slate-grey margins to the feathers of the flanks; below and behind the eye is a bare place. Bill orange. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the seventh and eighth, bastard primary 1·0 inch. Legs, feet, and claws yellow. Length of wing 4·7 inches, tail 3·94, culmen 1·1, tarsus 1·32.

It is not known that the *female* differs from the male; *birds of the year* and *young in first plumage* are unknown.

The Travancore Ouzel is peculiar to the district in the extreme south of India whose name it bears, breeding at an elevation of 4000 feet.

a. Ad. sk.	Travancore.	Frank Bourdillon, Esq. [C.].

21. Merula kinnisi.

Merula kinnisii, *Blyth, J. A. S. Beng.* xx. p. 177 (1851); *Kelaart, Prod. Cat.* p. 122 (1852); *Blyth, Ibis*, 1867, p. 304; *Holdsw. P. Z. S.* 1872, p. 446.
Merula kinnissii, *Blyth, Layard, Ann. Nat. Hist.* xii. p. 270 (1853).
Turdus kinnisii (*Blyth*), *Gray, Hand-l. B.* i. p. 256. no. 3717 (1869).
Turdus kinnisi (*Blyth*), *Legge, Birds of Ceylon*, p. 449 (1879).

In the *adult male* the general colour of the upper parts is sooty black, the feathers obscurely edged with dark slate-grey; no trace of eye-stripe; wings and tail-feathers dark brown, approaching black, the outer webs broadly margined with dark slate-grey. The whole of the underparts, including the axillaries and under wing-coverts, dull black, each feather obscurely margined with dark slate-grey. Bill orange-yellow. Wings with the fourth and fifth primaries nearly equal and longest, second primary intermediate in length between the eighth and ninth, bastard primary 1·15 to 0·81 inch. Legs, feet, and claws yellow. Length of wing 4·5 to 4·0 inches, tail 3·7 to 3·25, culmen 1·0 to 0·89, tarsus 1·39 to 1·2.

The *female* is slightly paler than the male. *Birds of the year* retain some of the ochraceous tips to the wing-coverts. *Young in first plumage* have pale shaft-lines to the feathers of the head and back, pale tips to the wing-coverts, and pale centres and dark tips to the feathers of the underparts.

The Ceylonese Ouzel is supposed to be peculiar to Ceylon, where it breeds on the hills, descending into the valleys during the cold season.

a, *b*. ♂ ad.; *c*. ♀ ad. sk.	Ceylon.	Dr. Kelaart [C.].
d. Juv. sk.	Ceylon.	E. L. Layard, Esq. [C.].
e, *f*. ♂ ♀ ad. sk.	Newara Eliya, 7000 feet.	A. Whyte, Esq. [C.].

Merula carbonaria and Merula flavipes.

The difference between these two forms appears to be only subspecific. In the north of Brazil, where their geographical ranges

meet, they probably interbreed, as intermediate forms of both sexes occur. The synonymy of the Southern form is as follows:—

22. Merula flavipes.

Turdus flavipes, *Vieill. N. Dict. d'Hist. Nat.* xx. p. 277 (1818); *Spix, Av. Bras.* i. p. 69, pl. lxvii. fig. 2 (1824); *Gray, Gen. B.* i. p. 219 (1847, *partim*); *Cab. Mus. Hein.* i. p. 5 (1850); *Sclater, P. Z. S.* 1859, p. 334; *id. Cat. Amer. B.* p. 6 (1862, *partim*); *Gray, Hand-l. B.* i. p. 258. no. 3773 (1869, *partim*); *Pelz. Orn. Bras.* pp. 94, 421 (1871); *Berlepsch, Journ. Orn.* 1873, p. 230; *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873, *partim*).

Turdus carbonarius, *Licht., apud Neuwied, Beitr. Naturg. Bras.* iii. p. 641 (1833), *apud Licht. Nomencl. Av.* p. 25 (1854, *partim*); *Burm. Th. Bras.* iii. p. 125 (1855).

In the *adult male* the general colour of the upper parts is dark slate-grey, shading into black on the head, nape, lores, and ear-coverts: no trace of eye-stripe; quills, wing-coverts, innermost secondaries, and tail-feathers black. Chin, throat, and breast black, shading into slate-grey on the rest of the underparts, the chin more or less streaked with white, and the under tail-coverts obscurely tipped with greyish white; axillaries and under wing-coverts black; inner margin of quills brown. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 0·98 to 0·65 inch. Length of wing 4·45 to 4·3 inches (female 4·2 to 4·1), tail 3·56 to 3·1, culmen 0·85 to 0·72, tarsus 1·1 to 0·95.

In the *female* the general colour of the upper parts is olive-brown, shading into russet-brown on the head, wings, and tail. The underparts are pale brown, shading into greyish white on the centre of the belly; the feathers of the chin and upper throat have fan-shaped dark-brown terminal spots, and the under tail-coverts are tipped with greyish white; axillaries and under wing-coverts chestnut; inner margin of quills pale chestnut-brown. Bill dark brown. Legs, feet, and claws brown. *Young in first plumage* appear to be unknown; but *males of the year* resemble adults, with a few of the wing-coverts tipped with ochraceous.

The Brazilian Grey Ouzel is found in Brazil at Bahia, Rio Janeiro, to as far south as Santa Catherina. Nothing appears to be known of its migrations.

a. ♂ ad. sk.	Brazil.	M. Claussen [P.].
b, *c*. ♂ ad.; *d*. ♂ imm. st.	Brazil.	J. Gould, Esq.
e. ♂ ad. sk.	Brazil.	Henry Seebohm, Esq. [P.].

23. Merula carbonaria.

Turdus carbonarius, *Licht. Verz. Doubl.* p. 37 (1823); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 275 (1850); *Licht. Nomencl. Av.* p. 25 (1854, *partim*).

Turdus flavipes, *Vieill. apud Sclater, Cat. Amer. B.* p. 6 (1862, *partim*), *apud Taylor, Ibis*, 1864, p. 80, *apud Léot. Ois. Trinidad*, p. 199 (1866), *apud Gray, Hand-l. B.* i. p. 258. no. 3773 (1869, *partim*), *apud Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873, *partim*).

This form differs from the preceding in having the black on the breast extending over the belly, leaving the flanks, vent, and under tail-coverts slate-grey. The female also differs from that of the preceding form in having the rump, vent, and under tail-coverts inclined to slate-grey. It is a slightly larger bird, the wing measuring in the males 4·5 to 4·4 inches, in the females 4·3 to 4·2.

The Trinidad Grey Ouzel is found in the island of Trinidad and in Venezuela. It is supposed to be a resident.

a. ♂ ad. sk.	Venezuela.	Henry Seebohm, Esq. [P.].
b. ♀ ad. sk.	Trinidad.	Henry Seebohm, Esq. [P.].

24. Merula reevii.

Turdus reevii, *Lawrence, Ann. Lyc. New York*, 1870, p. 234.

In the *adult male* the general colour of the upper parts is slate-grey, shading into dark slate on the head; lores brown; ear-coverts dark slate-grey; no trace of eye-stripe; wings brown, the wing-coverts, innermost secondaries, and unemarginated portions of outer webs of quills slate-grey; tail brown, the central feathers and outside webs of the other tail-feathers slate-grey. Chin and upper throat nearly white, streaked with nearly black; rest of underparts pale brownish grey, shading into nearly white on the centre of the belly; under tail-coverts nearly white; axillaries and under wing-coverts pale brownish grey; inner margin of quills pale slate-grey. Bill bright yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the seventh and eighth, bastard primary 1·1 to 0·95 inch. Legs, feet, and claws pale yellow. Length of wing 4·68 to 4·45 inches, tail 3·93 to 3·55, culmen 0·9, tarsus 1·25 to 1·21.

The *female* is unknown. *Young in first plumage* have the usual characteristics of the allied species in similar stages.

The Puna Ouzel is only known from Puna Island, in the Gulf of Guayaquil, off the coast of Ecuador.

The British Museum does not possess an example of this species. I have described the type in the Museum of the Smithsonian Institution, and have examined a skin in the collection of Messrs. Salvin and Godman, intermediate between young in first plumage and bird of the year.

25. Merula nigriceps.

Turdus nigriceps, *Jelski, fide Cab. Journ. Orn.* 1874, p. 97; *Tacz. P. Z. S.* 1874, p. 503, pl. lxiv.; *Cab. Journ. Orn.* 1878, p. 195.

In the *adult male* the general colour of the upper parts is slate-grey, shading into black on the head; lores black; ear-coverts dark slate-grey; no trace of eye-stripe; wings brown, the wing-coverts, innermost secondaries, and unemarginated portions of outer webs of quills slate-grey; tail brown. Chin and upper throat nearly white,

streaked with nearly black; rest of underparts palish slate-grey, shading into nearly white on the centre of the belly; under tail-coverts nearly white, with grey bases and sides; axillaries and under wing-coverts slate-grey; inner margin of quills pale grey. Bill bright yellow. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the seventh and eighth, bastard primary 0·95 to 0·9 inch. Legs, feet, and claws pale yellow. Length of wing 4·55 to 4·2 inches, tail 3·35 to 3·25, culmen 1·0 to 0·85, tarsus 1·25 to 1·2.

The *female* differs from the male in having the grey of both the upper and under parts replaced by brown. *Birds of the year* and *young in first plumage* appear to be unknown.

Jelski's Ouzel appears to range from the mountains of Ecuador and Central Peru to the Sierra de Cordova in the centre of the Argentine Republic.

26. Merula rufitorques.

Turdus (Merula) rufitorques, *Hartl. Rev. Zool.* 1844, p. 214.

Turdus rufitorques (*Hartl.*), *Gray, Gen. B.* i. p. 219 (1847); *Du Bus, Esquiss. Orn.* pls. 19 & 20 (1848); *Bp. Consp.* i. p. 275 (1850); *Sclater, P. Z. S.* 1859, p. 334; *Scl. & Salv. Ibis*, 1860, p. 29; *Baird, Rev. Am. B.* p. 32 (1864); *Gray, Hand-l. B.* i. p. 258. no. 3766 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 22 (1879).

In the *adult male in spring plumage* the general colour of the upper parts is dark brown, approaching black; lores and ear-coverts the same; no trace of eye-stripe; nape deep rich chestnut. Chin and upper throat chestnut, each feather having a fan-shaped black terminal spot; lower throat and breast deep rich chestnut; remainder of the underparts, including the axillaries and under wing-coverts, dark brown, approaching black; under tail-coverts with white shafts; inner margin of quills scarcely paler brown than the rest of the under surface. Bill bright yellow above and below. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·9 to 0·75 inch. Legs, feet, and claws yellowish brown. Length of wing 5·3 to 5·05 inches, tail 4·2 to 3·8, culmen 0·93 to 0·89, tarsus 1·3 to 1·15.

The *female* differs from the male in having the black parts replaced by brown, and the deep rich chestnut by dull chestnut; the throat is striated with dark brown; the white on the under tail-coverts, which in the male scarcely extends beyond the shafts, in the female forms a lanceolate white centre one third of the breadth of the feather. The colour of the bill is also pale brown. In some skins the underparts below the breast are black, each feather narrowly margined with pale brown. These I take to be *males in autumn plumage*. Some birds have the feathers of the head margined with dark chestnut. This I take to be an individual peculiarity. The *young in first plumage* appear to be unknown.

The Chestnut-necked Ouzel appears to be confined to Guatemala,

in Central America, where it is a resident, subject only to very restricted internal migrations.

a. ♂ ad. st.	[Guatemala.]	Purchased.
b. ♀ ad. sk.	[Guatemala.]	Purchased.
c. ♂ ad. sk.	Guatemala.	Purchased.
d, *e*. ♂ ad. sk.	Guatemala.	Osbert Salvin, Esq. [C.].

27. Merula pritzbueri.

Turdus pritzbueri, *Layard*, *Ann. Nat. Hist.* i. p. 374 (1878); *id. Ibis*, 1878, p. 254; *Tristram*, *Ibis*, 1879, p. 187, pl. v.
Merula pritzbuesi (*Layard*), *E. P. Ramsay*, *Pr. Linn. Soc. N. S. Wales*, iii. p. 337 (1879).

In the *adult male* the entire head, neck, and breast are creamy grey, clearly defined from the rest of the plumage, which is very dark brown, scarcely distinguishable from black. Bill pale yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·8 to 0·7 inch. Legs, feet, and claws pale yellow. Length of wing 4·26 to 4·05 inches, tail 2·96 to 2·85, culmen 0·9 to 0·85, tarsus 1·3 to 1·25.

The *female* differs from the male in having the head, neck, and breast pale earthy brown, much darker than in the male, and shading into the dark brown of the rest of the plumage, which on the upper parts is not quite as black as that of the male, and the feathers of the underparts have chestnut-brown margins. *Young in first plumage* are barred and spotted with rufous *.

The Lifu Ouzel is found in the island of Lifu, one of the Loyalty Islands, and probably in some of the adjacent islands.

a, *b*. ♂ ♀ ad. sk.	Lifu, Loyalty Islands, Aug. 28, 1878.	E. L. Layard, Esq. [P.].
c. ♀ ad. sk.	Port Resolution, Tanna, New Hebrides, Aug. 22, 1859 (*J. Macgillivray*).	Eyton Collection.

28. Merula bicolor.

Merula bicolor, *Layard*, *Ibis*, 1876, pp. 153, 392.
Merula ruficeps, *E. P. Ramsay*, *Pr. Linn. Soc. N. S. Wales*, i. p. 43 (1876).
Turdus bicolor (*Layard*), *Tristram*, *Ibis*, 1879, p. 189.

In the *adult male* the entire head, neck, and upper breast are a deep rich buff, almost an orange-buff, well defined from the rest of the plumage, which is a uniform dull black above and below, including the under tail-coverts, but slightly paler on the axillaries. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth,

* Since writing the above I have received some skins, collected by Mr. Layard on Lifu, which have the head and neck nearly white, and have pale shafts and tips to the under tail-coverts, and are certainly not specifically separable (possibly not even subspecifically so) from *M. albifrons*.

bastard primary 0·8 to 0·6 inch. Legs, feet, and claws yellow. Length of wing 4·05 inches, tail 2·7, culmen 0·83, tarsus 1·28.

The *female* only differs from the male in having the buff of the head and neck not sharply defined, but shading into the black on the nape and upper breast. *Birds of the year* and *young in first plumage* appear to be unknown.

The Kandavu Ouzel is confined to the island of that name, one of the Fiji Islands.

The British Museum does not possess an example of this handsome bird. I have taken my description from Layard's type, which he kindly lent me for that purpose, and from the specimens in the Godeffroy Museum in Hamburg. There is also an example in Count Turati's collection in Turin.

29. Merula tempesti.

Turdus tempesti, *Layard, P. Z. S.* 1876, p. 420; *Tristram, Ibis*, 1879, p. 189.

Merula tempestii (*Layard*), *Layard, Ibis*, 1876, p. 392; *E. P. Ramsay, P. L. Soc. N. S. Wales*, iii. p. 337 (1879).

This species is scarcely distinguishable from *M. poliocephala*. The fully *adult male*, however, will be found to differ from that species, if carefully examined, in the following particulars:—The pale brownish grey of the chin, throat, and upper breast does not shade gradually into the dark colour of the rest of the underparts, but is abruptly separated from it; and the rest of the underparts (except the axillaries and under wing-coverts, which are pale brownish grey in both species) are uniform dull black, without any brown edges to the feathers, and without the pale shaft-lines and tips of the under tail-coverts; both the culmen and tarsus are also slightly longer. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 0·9 to 0·85 inch. Legs, feet, and claws yellow. Length of wing 4·25 to 3·9 inches, tail 2·8, culmen 0·94 to 0·92, tarsus 1·41 to 1·32.

The *female* has the head very dark brown, scarcely paler than the back. The chin, upper throat, and ear-coverts are pale brownish grey, shading into dark brown on the lower throat, axillaries, and under wing-coverts, the rest of the underparts, including the under tail-coverts, being very dark brown, nearly black. *Birds of the year* appear to be unknown; but *young in first plumage* have pale shaft-lines to the feathers of the head and back, and the feathers of the underparts have brown margins.

The Taviuni Ouzel is confined to the island of that name, one of the Fiji Islands.

a. ♀ ad. sk.	Taviuni, Fiji Islands (*Liardet*).	F. Godman & O. Salvin, Esqrs. [P.].
*b**. ♂ ad. sk.	[Taviuni.]	Julius Brenchley, Esq. [P.].

* This skin is marked as being from Norfolk Island; but Mr. Brenchley's original label is no longer on the bird, and I think it quite possible that the ticket has been transposed.

30. Merula albifrons.

Merula albifrons, *E. P. Ramsay, P. L. Soc. N. S. Wales*, iii. p. 336 (1879); *E. L. & E. L. C. Layard, Ibis*, 1881, p. 137.

Head, neck, and chest white; the remainder of the upper and underparts dark brown, darkest on the wings and tail; whitish shaft-lines and tips to the under tail-coverts. Bill, legs, feet, and claws yellow; wing-formula unknown. Length of wing 4 inches, tail 2·8, culmen 0·95, tarsus 1·3.

The Eromanga Ouzel is described as frequenting the mountainous parts of Eromanga, one of the most southern islands of the New Hebrides group.

The British Museum does not possess a skin of this species; nor have I seen the type specimen, which appears to be the only one hitherto obtained. It is doubtful whether it is more than subspecifically distinct from *M. pritzbueri*, which varies considerably in the colour of the head, neck, and chest.

31. Merula poliocephala.

Ash-headed Thrush, *Lath. Gen. Syn. Suppl.* ii. p. 373 (1801).
Turdus poliocephalus, *Lath. Ind. Orn. Suppl.* p. xliv (1801); *Gray, Hand-l. B.* i. p. 255. no. 3708; *Tristram, Ibis*, 1879, p. 189.
Merula nestor, *Gould, P. Z. S.* 1835, p. 186; *Jard. & Selby, Ill. Orn.* iv. pl. 37 (1840).
Geocichla poliocephalus (*Lath.*), *Bp. Consp.* i. p. 268 (1850).
Turdus badius, *Lath. apud Gray, Hand-l. B.* i. p. 255. no. 3707 (1869).
Merula poliocephalus (*Lath.*), *E. P. Ramsay, P. L. Soc. N. S. Wales*, iii. p. 337 (1879).

In the *adult male* the entire head, neck, and throat are pale brownish grey, slightly darker on the crown, abruptly defined on the nape from the rest of the upper parts, which are a uniform dull black, and shading into dark brown on the upper breast; axillaries and under wing-coverts pale brownish grey; the rest of the underparts dark brown, each feather somewhat paler on the edges; the under tail-coverts with pale grey shaft-lines and tips. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 0·85 to 0·65 inch. Legs, feet, and claws yellow. Length of wing 4·52 to 4·05 inches, tail 3·3 to 2·85, culmen 0·9 to 0·83, tarsus 1·21 to 1·1.

The *female* scarcely differs from the male, except in having the head and neck slightly darker. *Birds of the year* and *young in first plumage* appear to be unknown.

The Norfolk-Island Ouzel is confined to the island from which it derives its name, between New Caledonia and New Zealand.

a. Ad. sk.	Norfolk Island.	
b, *c*. ♂ ad. sk.	Norfolk Island (*Dr. F. M. Rayner*).	Voyage of H.M.S. 'Herald.'
d. ♀ ad. sk.	Norfolk Island.	Julius Brenchley, Esq. [P.].
e. Ad. st.	Norfolk Island.	

32. Merula albiceps.

Turdus albiceps, *Swinh. Ibis*, 1864, p. 363; *id. Ibis*, 1866, pp. 135, 315, pl. v.; *Gray, Hand-l. B.* i. p. 260. no. 3797 (1869); *Swinh. P. Z. S.* 1871, p. 367; *David et Oust. Ois. Chine*, p. 150 (1877).

In the *adult male in spring plumage* the entire head, neck, and throat are pure white, the rest of the upper parts dark brown, nearly black, slightly paler on the margins of the quills. Breast, axillaries, under wing-coverts, and flanks dark brown, shading into chestnut on the belly. Under tail-coverts brown, with very pale chestnut-brown tips and shafts. Bill orange. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·0 to 0·8 inch. Legs, feet, and claws yellowish brown. Length of wing 4·5 to 4·25 inches, tail 3·26 to 2·9, culmen 0·9 to 0·8, tarsus 1·28 to 1·14.

The *female* differs from the male in having the crown of the head and the general colour of the upper parts dark olive-brown. The forehead, an indistinct stripe over each eye, the sides of the throat and nape are mixed white and brown; and the general colour of the underparts is lighter; the axillaries and under wing-coverts are indistinctly margined with chestnut. *Birds of the year* resemble the female, but have pale chestnut-brown shaft-lines on the feathers of the upper parts, and dark-brown terminal transverse bars to those of the underparts. *Young in first plumage* are unknown.

The Formosan Ouzel appears to be confined to the island of Formosa.

a. Ad. sk. Formosa. R. Swinhoe, Esq. [C.].

33. Merula castanea.

Merula castanea, *Gould, P. Z. S.* 1835, p. 185; *Blyth, J. A. S. Beng.* xvi. p. 149 (1847); *id. Cat. B. Mus. As. Soc.* p. 162 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 197 (1854); *Gould, B. Asia*, ii. pl. 75 (1859); *Jerd. B. Ind.* i. p. 526 (1862); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 42 (1863); *Godw.-Aust. J. A. S. B.* xxxix. pt. ii. p. 268 (1870); *Hume, Nests & Eggs Ind. B.* p. 235 (1873).

Turdus rubrocanus, *Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 154. no. 575, *undè Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Turdus castaneus (*Gould*), *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 81 (1846); *id. Gen. B.* i. p. 219 (1847); *id. Hand-l. B.* i. p. 255, no. 3702 (1869).

Geocichla castanea (*Gould*), *Bp. Consp.* i. p. 268 (1850).

In the *adult male in spring plumage* the entire head, neck, and throat are very pale grey, darker on the lores and ear-coverts, and becoming greyish white on the chin and throat; no trace of eye-stripe; back and scapulars deep rich chestnut, suffused with dark brown on the upper back and with olive-brown on the longest upper tail-coverts. Wings, wing-coverts, and tail dark brown;

breast, flanks, and belly deep rich chestnut, the centre of the belly more or less marked with dark brown and white; axillaries and under wing-coverts generally a deep rich chestnut, but occasionally approaching a dark brown; inner margin of quills brown; under tail-coverts dark brown, with white tips and shafts. Tail dark brown. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 1·0 to 0·75 inch. Length of wing 5·6 to 5·1 inches, tail 4·4 to 3·95, culmen 1·1 to 1·01, tarsus 1·4 to 1·24. Legs, feet, and claws yellow.

The *female* differs from the male in having the whole of the upper parts suffused with olive, and in having obscure streaks on the sides of the throat; and the chestnut of the underparts is much duller and lighter. *Males of the year* resemble the female, but are if anything slightly darker, and retain the ochraceous tips of the young in first plumage on the greater and median wing-coverts. *Young in first plumage* appear to be undescribed.

The Grey-headed Ouzel appears to be confined to the Himalayas from Cashmere to Assam, breeding at high elevations, descending in winter in flocks to the valleys.

a. ♂ ad. sk.	Cashmere.	Purchased.
b. ♂ ad. sk.	Cashmere.	E. M. Langworthy, Esq. [P.].
c, *d*, *e*. ♂ ad. sk.	Nynee Tal.	Capt. Stackhouse Pinwill [P.].
f. ♂ ad. sk.	Near Almorah.	Capt. Stackhouse Pinwill [P.].
g. ♂ ad. sk.	Nepal (*Hodgson*).	India Museum. (Type of *Turdus rubrocanus*, Hodgs.)
h. ♂ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
i. ♀ ad.; *k*. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
l. ♀ ad. sk.	Darjiling (*Pearson*).	India Museum.
m. ♀ ad. sk.	[Assam (*Griffith*).]	India Museum.

34. Merula gouldi.

Merula gouldi, *Verr. Nouv. Arch. du Mus. Hist. Nat.* vi. *Bull.* p. 34 (1870); *id. op. cit.* vii. *Bull.* p. 32 (1871); *id. op. cit.* ix. *Bull.* pl. v. fig. 2 (1873); *Prjev. Rowley's Orn. Misc.* ii. p. 198 (1877); *David et Oust. Ois. Chine*, p. 148, pl. xxxix. (1877).

In the *adult male in spring plumage* the forehead, crown, lores, and ear-coverts are dark sooty brown, shading into a slightly lighter brown on the chin, throat, and neck; wings and tail dark brown; longest upper tail-coverts olive-brown; under tail-coverts dark brown, with white tips and shaft-lines; thighs brown; centre of belly with more or less white and brown markings. The remaining plumage, back, upper tail-coverts (except the longest), breast, belly, flanks, axillaries, and under wing-coverts a uniform rich chestnut; inner margin of quills brown. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·0 inch. Legs, feet, and claws pale brown. Length

of wing 5·7 to 5·5 inches, tail 4·8 to 4·5, culmen 1·06, tarsus 1·45 to 1·4.

In the *female* all the colours are slightly paler, the throat is grey striped with black, and the bill is brown. *Birds of the year* and *young in first plumage* appear to be unknown.

L'Abbé David's Ouzel breeds in the pine regions of Kansu, in North-west China, where it is said to be migratory. Further south, in West Sechuen, it breeds in the pine regions, and descends into the cultivated valleys in winter.

The British Museum does not possess an example of this handsome Ouzel. The types are in the Museum of the Jardin des Plantes in Paris; and I have a skin of a male in my collection.

35. Merula kessleri.

Merula kessleri, *Prjev. Rowley's Orn. Misc.* ii. p. 198, pl. liv. (1877).

In the *adult male in spring plumage* the entire head, nape, neck, and upper breast are dark brown, approaching black; back buffish white, shading into dullish chestnut on the scapulars and rump; upper tail-coverts buffish white with brown centres; wings and wing-coverts nearly black, except the lesser wing-coverts, which are buffish white; tail nearly black; lower breast buffish white; axillaries and under wing-coverts buffish white, with dark-brown tips; belly and flanks deep chestnut; under tail-coverts dark brown, with chestnut margins. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·8 inch. Legs, feet, and claws brown. Length of wing 6·25 to 5·85 inches, tail 0·5 to 4·65, culmen 1·01, tarsus 1·45 to 1·4.

The *female* differs from the male in having the nearly black parts a paler brown, the buffish white parts pale greyish brown, and the chestnut parts russet-brown; the bill is dark brown, yellow at the base. *Birds of the year* and *young in first plumage* appear to be undescribed.

Prjevalsky's Ouzel breeds in Kansu in North-west China. Its winter quarters are unknown.

The British Museum does not possess an example of this species. The type is in the St.-Petersburg Museum; and I have a male in my collection.

36. Merula cardis.

Turdus cardis, *Temm. Pl. Col.* ii. pl. 518 (1824); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 270 (1850); *Cab. Mus. Hein.* i. p. 3 (1850); *Temm. et Schleg. Faun. Japon. Aves*, p. 65, pls. xxix., xxx. (1847); *Swinh. Ibis*, 1860, p. 132; *id. Ibis*, 1861, p. 37; *Whitely, Blakiston, Ibis*, 1862, p. 319; *Swinh. P. Z. S.* 1863, p. 280; *Whitely, Ibis*, 1867, p. 199; *Gray, Hand-l. B.* i. p. 255. no. 3715 (1869); *Swinh. Ibis*, 1870, p. 248; *id. P. Z. S.* 1871, p. 367; *David et Oust. Ois. Chine*, p. 150 (1877); *Blakiston & Pryer, Ibis*, 1878, p. 240.

In the *adult male in spring plumage* the entire head, nape, neck, and upper breast are dark brown, approaching black, shading into dark slate-grey on the back, rump, wing-coverts, and upper tail-coverts; wings and tail dark brown, margined with dark slate-grey

on the outer webs; axillaries and under wing-coverts dark slate-grey; the rest of the underparts white, the feathers of the breast and upper flanks with dark slate-grey fan-shaped terminal spots, and the feathers of the lower flanks and under tail-coverts with slate-grey sides; inner margin of quills brown. Bill yellow. Wings with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·7 to 0·45 inch. Legs, feet, and claws yellow. Length of wing 4·65 to 4·35 inches, tail 3·1 to 2·9, culmen 0·9 to 0·75, tarsus 1·25 to 1·15.

The *female* differs from the male in having the upper parts a uniform olive-brown; the axillaries and under wing-coverts are orange-chestnut; and the sides of the neck, breast, and flanks are suffused with orange-chestnut; the feathers of the cheeks, lower throat, and upper breast, as well as those of the lower breast and flanks, have dark-brown fan-shaped terminal spots. Bill brown. *Males of the year* resemble the female, but are very slightly suffused with chestnut on the sides of the neck, breast, and flanks; the chestnut axillaries and under wing-coverts appear to be partially retained after the second autumn moult. *Young in first plumage* are unknown.

The Grey Japanese Ouzel appears to be confined to Japan during the breeding-season, frequenting both islands. It winters in South China and Hainan.

a. ♂ ad. st.	Japan.	Zoological Society.
b. ♂ ad. sk.	Japan.	E. Wilson, Esq. [P.].
c. ♂ ad. sk.	Japan.	Leyden Museum.
d. ♀ ad. sk.	Nagasaki.	H. Whitely, Esq. [C.]
e. ♂ imm. sk.	Amoy.	R. Swinhoe, Esq. [C.].

37. Merula fuscata.

Turdus fuscatus, *Pallas, Zoogr. Rosso-Asiat.* i. p. 451 (1811); *Gray, Gen. B.* i. p. 219 (1847); *Middend. Reis. Sibir. Zool.* ii. pt. 2, p. 172 (1851); *Gould, B. Asia*, i. pl. lxv. (1851); *Brehm, Vogelf.* p. 161 (1855); *Newt. List B. Eur. Blasius*, p. 9 (1862); *Swinh. P. Z. S.* 1862, p. 317; *Blakiston, Ibis*, 1862, p. 319; *Swinh. P. Z. S.* 1863, p. 280; *Radde, Reis. Sibir. Vög.* p. 230 (1863); *Swinh. Ibis*, 1863, pp. 93, 277; *Degl. et Gerbe, Orn. Eur.* i. p. 409 (1867); *Fritsch, Vög. Eur.* p. 138 (1870); *Swinh. P. Z. S.* 1871, p. 366; *Godw.-Aust. J. A. S. Beng.* xliii. pt. 2, p. 159 (1874); *Swinh. Ibis*, 1874, p. 157; *Tacz. Bull. Soc. Zool. France*, 1876, p. 147; *Prjev. Roxley's Orn. Misc.* ii. p. 196 (1877); *Blakiston & Pryer, Ibis*, 1878, p. 241; *David et Oust. Ois. Chine*, p. 155 (1877).

Turdus eunomus, *Temm. Pl. Col.* ii. no. 514 (1831); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 270 (1850).

Turdus naumannii, *Temm., apud Gould, B. Eur.* ii. pl. lxxix. (1837), *apud Temm. Man. d'Orn.* iv. p. 604 (1840), *apud Hodgs. MS. Drawings (in the Brit. Mus.) of Birds of Nepal, Passeres*, pl. 152. no. 790, *undè Hodgs. Gray's Zool. Misc.* p. 83 (1844), *apud Blyth, Cat. B. Mus. A. S. B.* 1849, p. 161.

Cychloselys fuscatus (*Pall.*), *Bp. Cat. Parzud.* p. 5 (1856).

Turdus dubius, *Bechst., apud Jaub. et Barth.-Lapomm. Rich. Orn.* p. 213 (1859, *partim*), *apud Dresser, B. Eur.* pt. lviii. (1877), *apud Seebohm, Ibis*, 1879, pp. 3, 433.

Planesticus fuscatus (*Pall.*), *Jerd. B. Ind.* i. p. 530 (1862); *Blyth, Ibis*, 1866, p. 366.

In the *adult male in spring plumage* the general colour of the upper parts is brown, with dark centres to the feathers, frequently intermixed, especially on the scapulars, rump, and upper tail-coverts, with chestnut; lores and ear-coverts dark brown; eye-stripe buffish white, broad and well-defined, and reaching to the nape; wings dark brown, most of the secondaries and wing-coverts broadly edged on the outer web with chestnut, in some specimens extending over the whole outer web; tail dark brown, frequently shading into chestnut on the margin of the inner web. Chin, throat, and cheeks buffish white, in old birds only showing traces of a moustachial row of spots, more conspicuous and extending across the throat in younger birds; breast and flanks dark brown, each feather narrowly edged with buffish white, except on the sides of the breast, which are uniform black; belly and under tail-coverts buffish white, with more or less concealed dark centres to the feathers; axillaries and under wing-coverts pale chestnut with obscure white margins, browner in very old birds; inner margin of quills pale chestnut. Bill dark brown, paler at the base of the under mandible. Wings with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fourth and fifth, bastard primary 0·7 to 0·5 inch. Length of wing 5·3 to 4·8 inches, tail 4·0 to 3·25, culmen 0·9 to 0·84, tarsus 1·32 to 1·2. Legs, feet, and claws brown.

The *female* differs from the male in having the feathers of the lower throat and breast greyish buff, with dark-brown fan-shaped terminal spots; the dark centres to the feathers of the upper parts are almost obsolete. *After the autumn moult* the white margins of the feathers of the breast and flanks are much broader. *Males of the year* have the plumage of the adult female. *Young in first plumage* have ochraceous tips to the wing-coverts and innermost secondaries; the feathers of the back have nearly black margins and pale chestnut centres; the underparts resemble those of the female, but the spots are much larger.

The Dusky Ouzel breeds in Siberia, from the valley of the Yenesay eastwards, among the willow bushes in the sheltered gorges of the tundra, above the limit of forest-growth, and in a similar climate on the mountain regions near Lake Baikal. On migration it passes through S.E. Mongolia and North China, and winters in Japan and South China, occasionally straying westwards as far as Assam and even North-west India. Individuals occasionally wander as far as Europe, having occurred in Belgium and Italy.

a. ♂ imm. sk.	Bolschoi Ustram, Obb valley, Sept. 11, 1876.	Dr. O. Finsch [C.].
b. ♂ ad. sk.	Yenesay, lat. 66½°, June 11, 1877.	H. Seebohm, Esq. [P.].
c. ♀ ad. sk.	Yenesay, lat. 66½°, June 10, 1877.	H. Seebohm, Esq. [P.].
d. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].

e. Ad. sk.	Nepal. (Type of *Turdus naumannii*, Temm. apud Hodgs.)	B. H. Hodgson, Esq. [P.].
f, g. ♂ ad. sk.	Ningpo, China (Mar. 1872).	R. Swinhoe, Esq. [C.].
h. ♂ imm. sk.	Ningpo, China (Mar. 1872).	R. Swinhoe, Esq. [C.].
i. ♀ ad. sk.	Ningpo, China (Mar. 1872).	R. Swinhoe, Esq. [C.].
k. ♀ imm. sk.	Ningpo, China (Mar. 1872).	R. Swinhoe, Esq. [C.].
l. ♂ ad. sk.	Hoochow, China, Feb. 8, 1876.	R. B. Sharpe, Esq. [P.].
m. ♂ ad. sk.	Yokohama, Japan (*Pryer*).	Purchased.

38. Merula naumanni.

Turdus naumanni, *Temm. Man. d'Orn.* i. p. 170 (1820); *Naum. Vög. Deutschl.* ii. p. 288 (1822); *Brehm, Vög. Deutschl.* p. 391 (1831); *Temm. Man. d'Orn.* iii. p. 96 (1835); *Keys. u. Blas. Wirb. Eur.* pp. l, 176 (1840); *Werner, Atlas, Insectiv.* pl. 18 (1842); *Gray, Gen. B.* i. p. 219 (1847); *Degl. Orn. Eur.* i. p. 464 (1849); *Cab. Mus. Hein.* i. p. 3(1850); *Sclater, Ibis*, 1862, p. 319, pl. x.; *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 41 (1863); *Swinhoe, Ibis*, 1863, p. 277; *Degl. et Gerbe, Orn. Eur.* i. p. 410 (1867); *Gray, Hand-l. B.* i. p. 253. no. 3674 (1869); *Swinhoe, P. Z. S.* 1871, p. 366; *Tacz. Bull. Soc. Zool. France*, p. 147 (1876); *Dresser, B. Eur.* pt. lviii. (1877); *Prjev. Rowley's Orn. Misc.* ii. p. 195 (1877); *David et Oust. Ois. Chine*, p. 153 (1877).

Turdus ruficollis, *Pall., apud Gloger, Handb. Vög. Eur.* p. 180 (1834), *apud Nordm. Démid. Voy. Russ. mérid.* iii. p. 126 (1840), *apud Middend. Reis. Sibir. Zool.* ii. pt. 2, p. 170 (1851), *apud Newt. List B. Eur. Blasius*, p. 9 (1862), *apud Radde, Reis. Sibir. Vög.* p. 240 (1863).

Turdus dubius, *Bechst., apud Bp. Consp.* i. p. 270 (1850), *apud Jaub. et Barth.-Lapomm. Rich. Orn.* p. 213 (1859, *partim*), *apud Fritsch, Vög. Eur.* p. 137 (1870).

Turdus fuscatus, *Pall., apud Licht. Nomencl. Av.* p. 25 (1854), *apud Radde, Reis. Sibir. Vög.* ii. p. 236 (1863, *partim*).

Turdus abrekianus, *Dybowsky, Journ. Orn.* 1876, p. 193.

In the *adult male in spring plumage* the general colour of the upper parts is pale greyish brown, the upper tail-coverts, the rump, and frequently the scapulars and occasionally many of the feathers of the back being more or less chestnut; lores brown; ear-coverts pale grey chestnut, tipped with black; eye-stripe pale grey chestnut, somewhat obscure, but reaching to the nape; wing-feathers brown, with pale narrow margins; wing-coverts greyish brown, with pale grey or pale greyish-chestnut margins; tail chestnut, the terminal half of both webs of the two centre feathers and of the outer web of the rest greyish brown. Chin and throat varying from creamy white to chestnut, with a moustachial line of black spots on each side, which almost disappear in very old birds (young birds have frequently a few black spots on the throat, and more on the breast); the centre of the belly is almost white; but the remainder of the underparts below the breast have the feathers chestnut with broad white margins; under wing-coverts and axillaries chestnut; inner margin of quills pale chestnut. Bill brown, pale at the base of the under mandible. Wing with the third and fourth primaries nearly equal and longest, second primary intermediate in length

between the fourth and fifth, bastard primary 0·7 to 0·5 inch. Legs, feet, and claws brown. Length of wing 5·2 to 4·8 inches, tail 3·7 to 3·35, culmen 0·9 to 0·83, tarsus 1·31 to 1·2.

The *female* differs from the male in having the chestnut of the throat and breast paler and obscured by dull margins to the feathers. *After the autumn moult* the feathers of the underparts have broader pale margins. *Birds of the year* have black fan-shaped terminal spots to the feathers of the upper breast, and ochraceous tips to some of the median wing-coverts. In other respects the male of the year resembles the adult female. *Young in first plumage* are unknown.

The Red-tailed Ouzel apparently breeds in Siberia somewhat south of the Arctic Circle, and winters in China. A few remain to breed at high elevations in the neighbourhood of Lake Baikal; and during the autumn migration a few stragglers, principally immature birds, find their way into Europe.

a. ♂ ad. sk. Ussuri river, 48° N. lat. Nov. 4, 1873 (*Dr. Dybowsky*). R. B. Sharpe, Esq. [P.].
b, *c*. ♂ ad. sk. Ningpo, China, March 1872. R. Swinhoe, Esq. [C.].
d. ♀ ad. sk. Ningpo, China, March 1872. R. Swinhoe, Esq. [C.].
(Alleged hybrid between *M. naumannii* and *M. fuscata*.)

39. Merula protomomelæna*.

Turdus dissimilis, *Blyth*, *J. A. S. Beng.* xvi. p. 144 (1847, ♂, nec ♀); *Gray*, *Hand-l. B.* i. p. 256. no. 3729 (1869); *Godw.-Aust. J. A. S. Beng.* xli. pt. 2, p. 142 (1872); *Seebohm*, *P. Z. S.* 1879, p. 805, pl. lxiv.

Geocichla dissimilis (*Blyth*), *Blyth*, *Cat. B. Mus. As. Soc.* p. 163 (1849, ♂, nec ♀); *Bp. Consp.* i. p. 268 (1850); *Jerdon*, *Ibis*, 1872, p. 136, pl. vi.; *Hume*, *Nests & Eggs Ind. B.* p. 231 (1873); *Hume*, *Stray Feath.* ix. p. 103 (1880).

Turdulus cardis (*Temm.*), *apud Jerd. B. Ind.* i. p. 521 (1862).

Turdus protomomelas, *Cab. Journ. Orn.* 1867, p. 286; *Gray*, *Hand-l. B.* i. p. 256. no. 3730 (1869).

Turdus hyperythrus, *Blyth*, *fide Gray*, *Hand-l. B.* i. p. 256. no. 3729 (1869).

Geocichla tricolor, *Hume*, *Ibis*, 1871, p. 411.

In the *adult male in spring plumage* the entire head, nape, and throat are nearly black, shading into dark slate-grey on the rest of the upper parts; wings and tail brown, the outside webs edged with slate-grey; breast, axillaries, under wing-coverts, and flanks brilliant orange-chestnut, shading into white on the centre of the belly; under tail-coverts white, with slate-grey sides. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary equal to or slightly longer than the sixth, bastard primary 0·85 to 0·75 inch. Length of wing 4·75 to 4·5 inches, tail 3·45 to 2·95, culmen 0·96 to 0·87, tarsus 1·24 to 1·2.

* The objection to the use of Blyth's name is that he described the female, or immature male, as the adult male, and considered the adult male of *Merula unicolor* to be its female, in consequence of which both species have been confounded together under Blyth's name.

The *female* differs from the male in having the upper parts a nearly uniform olive-brown; throat nearly white in the centre, the feathers of the sides of the throat and chest with dark brown fan-shaped terminal spots; rest of underparts as in the male. *Males of the year* resemble females, and generally have traces of pale tips to many of the wing-coverts. *Young in first plumage* appear to be unknown.

Cabanis's Ouzel breeds in the eastern Himalayas, descending into the valleys during the cold seasons.

The British Museum does not possess an example of this species. The type in the Berlin Museum is an adult male; and skins of adult males are in the collection of Capt. Elwes, in the Tweeddale collection in the possession of Capt. Wardlaw-Ramsay, and in my own. The skin of an adult female or male of the year is in the collection of Col. Godwin-Austen.

40. Merula euryzona.

Merula euryzona, *Du Bus, Esquiss. Orn.* pl. xxxiv. (1845).
Turdus fulviventris, *Sclater, P. Z. S.* 1857, p. 273; *id. P. Z. S.* 1859, p. 331; *id. Ibis*, 1861, pl. viii.; *id. Cat. Amer. B.* p. 4 (1862); *Gray, Hand-l. B.* i. p. 257. no. 3753 (1869).
Turdus euryzonus (*Du Bus, Esquiss.*), *Sclater, Cat. Amer. B.* p. 2 (1862); *Wyatt, Ibis*, 1871, pp. 120, 320.

In the *adult male* the head and lores are black; ear-coverts dark brown; the rest of the upper parts dark olive-brown; no trace of eye-stripe; bastard wing, primary-coverts, and primaries dark brown; lesser, median, and greater wing-coverts, innermost secondaries, and outer webs of secondaries dark olive-brown; tail dark brown. Chin and upper throat black; lower throat and upper breast brown; lower breast, flanks, and belly deep rich chestnut; thighs and under tail-coverts olive-brown, obscurely margined with pale chestnut; axillaries deep rich chestnut; under wing-coverts chestnut and brown; inner margin of quills scarcely paler than the rest of the under surface. Bill yellow above and below. Wing with the fourth and fifth primaries nearly equal and longest, second primary about equal to the ninth, bastard primary 1·4 to 1·05 inch. Legs, feet, and claws dark brown. Length of wing 5·1 to 4·7 inches, tail 4·1 to 3·6, culmen 1·1 to 1·0, tarsus 1·4 to 1·05.

It is not known that there is any difference in the plumage of *the sexes*; the colours alter scarcely perceptibly by abrasion. *Birds in first autumn plumage* frequently show traces of chestnut terminal spots on the wing-coverts. I have not seen the *immature bird* in its spotted and barred plumage.

Sclater's Red-bellied Ouzel is confined to the highlands of Columbia and Ecuador, where it is probably subject to some internal migration.

a. Ad. sk. Bogotá. R. B. Sharpe, Esq. [P.].

41. Merula hortulorum*.

Turdus ——?, *Swinhoe, Ibis*, 1861, p. 37.
Turdus cardis, *Temm., apud Sclater, Ibis*, 1861, p. 37.
Turdus hortulorum, *Sclater, Ibis*, 1863, p. 196; *Swinhoe, P. Z. S.* 1863, p. 280; *Gray, Hand-l. B.* i. p. 256. no. 3734 (1869); *Swinhoe, P. Z. S.* 1871, p. 367; *David et Oust. Ois. Chine*, p. 151 (1877); *Seebohm, P. Z. S.* 1879, p. 805.
Turdus pelios, *Bonap., apud Cab. Journ. Orn.* 1870, p. 238, *apud Tacz. Journ. Orn.* 1875, p. 247, *apud Swinhoe, Ibis*, 1875, p. 519, *apud Tacz. Bull. Soc. Zool. France*, 1876, p. 149, *apud Swinhoe, Ibis*, 1876, p. 508.
Turdus campbelli, *Swinhoe, Ann. Nat. Hist.* 1873, p. 374.
Turdus chrysopleurus, *Swinhoe, Ibis*, 1874, p. 444, pl. xiv.
Turdus dissimilis, *Blyth, apud Seebohm, Stray Feath.* viii. p. 437 (1879, *partim*).

In the *adult male* the general colour of the upper parts is pale slate-grey, slightly shaded with olive on the head; lores and ear-coverts brown; no trace of eye-stripe; wings and tail brown, the outer webs of each feather pale slate-grey. The centre of the chin and throat nearly white, shading into greyish white on the cheeks and upper breast; lower breast, flanks, axillaries, and under wing-coverts deep rich chestnut, shading into white on the centre of the belly and under tail-coverts; inner margin of quills pale chestnut-brown. Bill orange-yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·6 to 0·5 inch. Legs, feet, and claws yellow. Length of wing 4·75 to 4·4 inches, tail 3·35 to 3·1, culmen 0·9 to 0·8, tarsus 1·35 to 1·2.

The *female* differs from the male in having the upper parts an almost uniform olive-brown; the centre of the throat is nearly white, and the cheeks and chest-feathers have dark-brown fan-shaped terminal spots; the rest of the underparts resembles that of the male. *Males of the year* resemble females. *Young in first plumage* are unknown.

Swinhoe's Ouzel is supposed to be a resident in South China, but probably only winters there. It is doubtfully recorded from Japan; and will most likely prove to be identical with the allied species from the Amoor, in which valley it doubtless breeds.

a. ♀ ad. sk. China. J. R. Reeves, Esq. [P.].

42. Merula atrigularis.

Turdus atrogularis, *Temm. Man. d'Orn.* i. p. 169 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 65 (1822); *Brehm, Vög. Deutschl.* p. 389 (1831); *Gould, B. Eur.* ii. pl. 75 (1837); *Werner, Atlas, Insectiv.* pl. 17 (1842); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 80 (1846); *id. Gen. B.* i. p. 219 (1847); *Degl. Orn. Eur.* i. p. 460 (1849); *Blyth, Cat. B. Mus. As. Soc.* p. 161 (1849); *Cab. Mus.*

* The type of *Turdus pelios*, Bonap., in the Leyden Museum, is unquestionably the African bird. The tail is much too long, and the colour of the upper parts not nearly olive enough for the female or immature male of this species.

Hein. i. p. 3 (1850); *Licht. Nomencl. Av.* p. 25 (1854); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 195 (1854); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 217 (1859); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 41 (1863); *id. Hand-l. B.* i. p. 256. no. 3721 (1869); *Gould, B. Gt. Br.* vol. ii. pl. xxxvi. (1873); *Tacz. Bull. Soc. Zool. France*, 1876, p. 148.

Turdus bechsteinii, *Naum. Vög. Deutschl.* ii. p. 310 (1822).

Cichloides bechsteinii (*Naum.*), *Kaup, Natürl. Syst.* p. 153 (1829).

Sylvia atrogularis (*Temm.*), *Savi, Orn. Tosc.* iii. p. 203 (1831).

Merula atrogularis (*Temm.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 17 (1838).

Turdus atrigularis (*Temm.*), *Keys. u. Blas. Wirb. Eur.* pp. li, 177 (1840); *Bp. Consp.* i. p. 273 (1850); *Newt. List B. Eur. Blasius*, p. 9 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 485 (1867); *Fritsch, Vög. Eur.* p. 144 (1870); *Salvad. Faun. Ital. Ucc.* p. 83 (1871); *Newt. ed. Yarr. Br. B.* i. p. 276 (1872); *Harting, Handb. Br. B.* p. 101 (1872); *Severtz. Turkest. Jevotn.* pp. 64, 118 (1873); *Dresser, Ibis*, 1875, p. 332; *Blanf. East. Pers.* ii. p. 158 (1876); *Dresser, B. Eur.* pt. lx. (1877); *Seebohm, Ibis*, 1879, p. 6.

Turdus varicollis, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 148. nos. 198, 199, & pl. 149. nos. 198, 199 (*icon. ined.*).

Turdus auroreus, *Pall.?, apud Nordm. Démid. Voy. Russ. mérid.* iii. p. 125 (1840).

Merula leucogaster, *Blyth, J. A. S. Beng.* xvi. p. 149 (1847).

Planesticus atrogularis (*Temm.*), *Bp. Cat. Parzud.* p. 5 (1854); *Jerd. B. Ind.* i. p. 529 (1862); *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 103 (1870); *Hume & Henders. Lahore to Yark.* p. 192 (1873).

Cichloides atrigularis (*Temm.*), *Tytler, Ibis*, 1869, p. 124.

Turdus mystacinus, *Severtz. Turkest. Jevotn.* pp. 64, 118, 119 (1873); *Dresser, Ibis*, 1875, p. 332.

In the *adult male in spring plumage* the general colour of the upper parts is pale greyish brown, the feathers on the head darker in their centres; lores nearly black; ear-coverts black, with pale tips; eye-stripe black, obscure, and not extending far behind the eye; wings and tail brown, each feather having a narrow pale margin; wing-coverts and outside webs of innermost secondaries the same colour as the back. Chin, throat, and breast black, each feather with an obscure pale margin; the rest of the underparts white, each feather, except those of the centre of the belly, having an obscure pale-grey centre; under tail-coverts white, the basal portion of the margin brown; axillaries grey, with an obscure shade of chestnut; under wing-coverts buff, darker in their centres; inner margin of quills pale brown. Bill black, somewhat paler at the base of the under mandible. Wings with the third and fourth primaries nearly equal and longest, second primary between the fourth and fifth, bastard primary 0·8 to 0·5 inch. Legs, feet, and claws dark brown. Length of wing 5·46 to 4·95 inches, tail 4·2 to 3·6, culmen 0·91 to 0·81, tarsus 1·35 to 1·25.

The *female* differs from the male in not having the black on the sides of the head and on the chin, throat, and breast; the feathers on the sides of the neck, upper throat, and breast have conspicuous dark centres, leaving the lower throat a uniform creamy white.

Males of the year have the plumage of the adult female. *Young in first plumage* have ochraceous tips to the wing-coverts and innermost secondaries; the feathers of the back have nearly black tips and ochraceous centres; the feathers of the throat, breast, and flanks have nearly black fan-shaped terminal spots; the ground-colour of the throat and the eye-stripe is ochraceous.

The Black-throated Ouzel breeds in the pine-forests of the valley of the Yenesay, in Central Siberia, between lat. 60° and 63°. It probably also breeds in the same latitude in the valley of the Obb, and in a similar climate in the pine region of the Himalayas and Eastern Turkestan. It winters in Western Turkestan, Baluchistan, and North India, occasionally straggling westwards into Europe, where it has been obtained in Russia, Germany, Denmark, Belgium, England, France, and Italy. Eastwards it has occurred on migration as far as Lake Baikal and, in winter, as far as Assam.

a. ♂ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
b. ♀ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
c. ♂ imm. sk.	Obdorsk.	Dr. O. Finsch [C.].
d, *e*. Ad. sk.	Kashgar.	Dr. Bellew [P.].
f, *g*. Ad. sk.	Yarkand.	R. B. Sharpe, Esq. [P.].
♂ ad. sk.	Guádar, Baluchistan, December 1871.	W. T. Blanford, Esq. [C.].
i. ♀ ad. sk.	Guádar, Baluchistan, December 1871.	W. T. Blanford, Esq. [C.].
k. ♀ ad. sk.	Maud, Baluchistan, Feb. 13, 1872.	W. T. Blanford, Esq. [C.].
l. ♂ ad. sk.	Afghanistan (*W. Griffith*).	India Museum.
m. Ad. sk.	Afghanistan (*W. Griffith*).	India Museum.
n, *o*, *p*. ♂ ad. sk.	Himalayas.	India Museum.
q. [♂] imm. sk.	Himalayas.	India Museum.
r. ♀ ad. sk.	Himalayas.	India Museum.
s. ♀ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
t, *u*, *v*. ♂ ad. sk.	Kumaon (*Capt. Strachey*).	India Museum.
w, *x*. ♂ ad.; *y*, *z*. ♀ ad. sk.	Nepal. (Type of *Turdus varicollis*, Hodgs.).	B. H. Hodgson, Esq. [P.].
a'. ♂ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
b', *c'*. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
d'. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
e'. ♀ ad. sk.	Nepal (*B. H. Hodgson*).	India Museum.
f'. ♂ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
g'. ♀ ad. sk.	Darjiling.	C. Fotheringham, Esq. [C.].
h'. ♂ ad. sk.	Bootan.	Major Pemberton [C.].
i'. ♂ imm.; *k'*. ♀ ad. st.	India.	J. R. Reeves, Esq. [P.].
l'. Skeleton.	India.	B. H. Hodgson, Esq.

43. Merula ruficollis.

Turdus ruficollis, *Pall. Reis. Russ. Reichs*, iii. p. 694 (1776); *Gmel. Syst. Nat.* i. p. 815 (1788); *Lath. Ind. Orn.* p. 333 (1790); *Pall. Zoogr. Rosso-Asiat.* i. p. 452 (1811); *Gray, Gen. B.* i. p. 219

(1847); *Blyth, Cat. B. Mus. As. Soc.* p. 161 (1849); *Bp. Consp.* i. p. 273 (1850); *Gould, B. Asia*, i. pl. 66 (1851); *Naum. Vög. Deutschl.* xiii. p. 316, pl. 360 (1853); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 194 (1854); *Licht. Nomencl. Av.* p. 25 (1854); *Swinh. P. Z. S.* 1863, p. 281; *Gray, Cat. Mamm. &c. Nepal Coll. Hodgson*, p. 41 (1863); *Degl. et Gerbe, Orn. Eur.* i. p. 412 (1867); *Gray, Hand-l. B.* i. p. 256. no. 3722 (1869); *Swinhoe, P. Z. S.* 1871, p. 366; *Severtz. Turkest. Jevotn.* pp. 69, 119 (1873); *Dresser, Ibis*, 1875, p. 334; *Tacz. Bull. Soc. Zool. France*, 1876, p. 147; *Prjev. Rowley's Orn. Misc.* ii. p. 197 (1877); *Dresser, B. Eur.* pt. lviii. (1877); *David et Oust. Ois. Chine*, p. 156 (1877).

Red-necked Thrush, *Lath. Gen. Syn.* ii. p. 31 (1783).

Turdus erythrurus, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 149. no. 200, & pl. 149*a*. no. 720, *undè Hodgs. Gray's Zool. Misc.* p. 83 (1840).

Planesticus ruficollis (*Pall.*), *Bp. Cat. Parzud.* p. 5 (1856); *Jerdon, B. Ind.* i. p. 528 (1862); *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 182 (1870).

Turdus hyemalis, *Dybowsky, Journ. Orn.* 1872, p. 439.

In the *adult male in spring plumage* the general colour of the upper parts is grey; lores dark grey; ear-coverts grey; eye-stripe chestnut, narrow, scarcely reaching to the nape; wings and wing-coverts brown, edged with grey; centre tail-feathers brown, remainder chestnut on inside web and basal portion of outside web. Chin, throat, and breast chestnut, the margin of the feathers paler; the rest of the underparts greyish white, the feathers on the flanks with obscure darker centres; axillaries and under wing-coverts buffish chestnut; inner margin of quills pale brown. Bill dark brown, under mandible yellowish at the base. Wings with the third and fourth primaries nearly equal and longest, second primary between the fourth and fifth, bastard primary 0·7 to 0·5 inch. Legs, feet, and claws brown. Length of wing 5·25 to 4·85 inches, tail 3·8 to 3·5, culmen 0·9 to 0·85, tarsus 1·38 to 1·28.

The *female* differs from the male in having very little chestnut on the throat and breast, which have the general colour of the flanks, with black fan-shaped terminal spots to many of the feathers. *Males of the year* much resemble the adult female, but have the throat and upper breast much darker. *Young in first plumage* are unknown.

M. ruficollis and *M. naumanni* are very nearly allied. Both species have always a great deal of chestnut on the tail. Adult *M. naumanni* shows more or less chestnut on the upper parts, especially on the rump, whilst there is no chestnut on the upper parts of immature *M. naumanni* or of *M. ruficollis* at any age. The chin, throat, and breast of both species are chestnut in the adult; but the moustachial line of black spots in *M. ruficollis* disappears at the second moult, whilst in *M. naumanni* it only disappears in very old birds. The only character that appears to be constant at all ages is the colour of the underparts below the breast. In *M. naumanni* these are always more or less marked with chestnut, whilst they are never so in *M. ruficollis*.

The Red-throated Ouzel is a Central-Asian bird, breeding in the

Himalayas and the mountains of Southern Siberia. Its principal breeding-quarters are doubtless somewhat south of the Arctic Circle, in Siberia. It winters in Turkestan, India, and China; and an occasional straggler has wandered into Europe.

a. ♀ imm. sk.	Ala Kul, Turkestan, May 9, 1876.	Dr. O. Finsch [C.].
b. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Turdus erythrurus*, Hodgs.)
c, *d*, *e*. Ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
f. ♂ ad. sk.	Nepal (*B. H. Hodgson*).	India Museum.
g, *h*. ♂ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
i, *k*. ♂ ♀ ad. sk.	Assam (*Griffith*).	India Museum.
l. ♂ ad. sk.	Lake Baikal (*Dr. Dybowsky*), May 18, 1871.	R. B. Sharpe, Esq. [P.].
m. ♂ ad. sk.	China.	Purchased.

44. Merula unicolor.

Turdus unicolor, *Tickell, J. A. S. Beng.* ii. p. 577 (1833); *Gould, P. Z. S.* 1837, p. 136; *Gray, Gen. B.* i. p. 220 (1847); *id. Hand-l. B.* i. p. 255. no. 3699 (1869, *Gould*), and p. 260. no. 3796 (1869, *Tickell*).

Turdus modestus, *Blyth, J. A. S. Beng.* xi. p. 460 (1842, *nec Eyton*).

Petrocincla homochroa, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. 139. no. 586, *undè Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Geocichla dissimilis, *Blyth, J. A. S. Beng.* xvi. p. 144 (1847, ♀, nec ♂); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 191 (1854).

Geocichla unicolor (*Tickell*), *Blyth, Cat. B. Mus. As. Soc.* p. 163 (1849); *Bp. Consp.* i. p. 268 (1850); *Jerd. B. Ind.* i. p. 519 (1862); *Hume & Henders. Lahore to Yark.* p. 192 (1873); *Hume, Nests & Eggs Ind. B.* p. 230 (1873).

Merula unicolor (*Tickell*), *Gould, B. Asia*, ii. pl. 65 (1858).

In the *adult male* the general colour of the upper parts, including the lores and ear-coverts, is an almost uniform ash-grey or dull lavender; no trace of eye-stripe; wings and tail brown, the outside webs margined with ash-grey. Chin pale grey; throat, breast, and flanks pale slate-grey, shading into white on the belly; under tail-coverts white, some feathers with brown margins towards the base; axillaries ash-grey, more or less marked with deep rich buff; under wing-coverts deep rich buff; inner margin of quills pale brown; upper part of belly and under tail-coverts occasionally showing traces of buff markings. Bill yellow. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·9 to 0·7 inch. Legs, feet, and claws pale brown. Length of wing 4·9 to 4·25 inches, tail 3·45 to 2·9, culmen 0·95 to 0·81, tarsus 1·28 to 1·16.

The *female* differs from the male in having the general colour of the upper parts olive-brown, shading into ash-grey on the rump and upper tail-coverts. The throat is much, and the breast slightly paler than in the male; all the feathers on the cheeks, and many of

the feathers on the throat have dark-brown fan-shaped terminal spots; the axillaries are usually entirely deep buff; and the inner margin of the quills is usually buff.

Birds of the year retain some of the pale tips to the wing-coverts. *Young in first plumage* appear to be unknown.

Examples from the Eastern Himalayas, where the rainfall is very great, have the upper back of the male and the whole of the upper parts of the female russet-brown, and are slightly smaller than Western birds. If admitted as subspecifically distinct, they will stand as *M. homochroa* of Hodgson.

Tickell's Ouzel breeds throughout the Himalayas, becoming rarer towards the east. During the cold season it descends to the plains.

a, b. ♂ ♀ ad. sk.	N. W. Himalayas.	Capt. Stackhouse Pinwill [P.].
c. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
d. ♂ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *P. homochroa*, Hodgs.)
e–h. ♀ ad.; *i.* ♂ imm. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
k, l. ♀ ad. imm. sk.	Bengal (*As. Soc.*).	India Museum.
m. ♀ ad. sk.	Bengal (*As. Soc.*).	India Museum.
n. ♂ imm. sk.	[Eastern Ghats.]	Dr. Jerdon [P.].
o. Ad. st.	Himalayas (*Farrell*).	Zoological Society. (Type of *Turdus unicolor*, Gould.)
p, q. ♂ ♀ ad.; *r, s.* Juv. sk.	Cashmere (*Dr. Bellew*).	India Museum.

45. Merula olivatra.

Merula olivatra, *Lafr. Rev. Zool.* 1848, p. 2.

Turdus olivater (*Lafr.*), *Sclater, P. Z. S.* 1859, p. 333; *Gray, Hand-l. B.* i. p. 258. no. 3770 (1869); *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873).

In the *adult male in spring plumage* the general colour of the upper parts is dark olive-green; head, lores, and ear-coverts black; no trace of eye-stripe; wings dark brown, the outside webs margined with dark olive-green; tail dark brown. Chin and throat black; the remainder of the underparts dull buffish brown, darkest on the flanks, thighs, and under tail-coverts; axillaries and under wing-coverts pale buffish-brown; inner margin of quills scarcely paler than the rest of the under surface. Bill bright yellow above and below. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the seventh and eighth, bastard primary 0·95 inch. Legs, feet, and claws pale. Length of wing 4·65 to 4·4 inches, tail 3·7 to 3·35, culmen 0·98 to 0·9, tarsus 1·28 to 1·25.

The *female*, *birds of the year*, and *young in first plumage* are unknown.

The Olive-backed Ouzel has only been recorded from the north of South America, between La Guayra and Caracas, about the centre of the coast of Venezuela.

The British Museum does not possess an example of this rare Ouzel. Skins are in the collections of Dr. Sclater, Messrs. Salvin and Godman, and my own.

46. Merula obscura.

Dark Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 31 (1783).
Turdus obscurus, *Gmel. Syst. Nat.* i. p. 816 (1788, *ex Lath.*); *Lath. Ind. Orn.* i. p. 333 (1790); *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 273 (1850); *Middend. Reis. Sibir., Zool.* ii. pt. 2, p. 169 (1853); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 214 (1859); *Swinhoe, Ibis*, 1863, p. 277; *Radde, Reis. Sibir., Vög.* p. 235 (1863); *Fritsch, Vög. Eur.* p. 143 (1870); *Swinh. P. Z. S.* 1871, p. 367; *Tacz. Journ. Orn.* 1872, p. 440; *Swinhoe, Ibis*, 1874, p. 443; *Blyth & Walden, B. Burm.* p. 99 (1875); *Tacz. Bull. Soc. Zool. France*, 1876, p. 148; *David et Oust. Ois. Chine*, p. 153 (1877); *Dresser, B. Eur.* pt. lxix. (1878); *Hume & Davison, Stray Feath.* vi. p. 251 (1878); *Seebohm, Ibis*, 1879, p. 4.
Turdus ocragaster, *Sparrm. Mus. Carls.* iv. pl. 85 (1789).
Turdus pallens, *Pallas, Zoogr. Rosso-Asiat.* i. p. 457 (1811); *Temm. et Schl. Faun. Japon., Aves*, p. 63, pl. xxvii. (1847); *Cab. Mus. Hein.* i. p. 2 (1850); *Swinhoe, Ibis*, 1860, p. 56; *Newt. List B. Eur. Blasius*, p. 9 (1862); *Salvad. Faun. Ital. Uec.* p. 82 (1871); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Dresser, Ibis*, 1875, p. 334; *Prjev. Rowley's Orn. Misc.* ii. p. 198 (1877).
Turdus seyffertitzii, *Brehm, Lehrb. eur. Vög.* ii. p. 972 (1824).
Turdus rufulus, *Drapiez, Dict. Class. d'Hist. Nat.* x. p. 443 (1826); *Gray, Hand-l. B.* i. p. 256. no. 3728 (1869).
Turdus werneri, *Géné, Mem. Ac. R. Tor.* xxxvii. p. 296, pl. 2 (1834).
Turdus pallidus, *Gmel. apud Temm. Man. d'Orn.* iii. p. 97 (1835), *apud Degl. Orn. Eur.* i. p. 461 (1849), *apud Newt. List B. Eur. Blasius*, p. 9 (1862), *apud Degl. et Gerbe, Orn. Eur.* i. p. 402 (1867).
Turdus modestus, *Eyton, P. Z. S.* 1839, p. 103; *Gray, Gen. B.* i. p. 218 (1847).
Turdus javanicus ?, *Horsf. apud Blyth, Cat. B. Mus. As. Soc.* p. 161 (1849).
Planesticus obscurus (*Gmel.*), *Bp. Cat. Parzud.* p. 5 (1856).
Turdus davidianus, *Milne-Edw. Nouv. Arch. du Mus. Hist. Nat.* i. *Bull.* p. 26 (1865); *Gray, Hand-l. B.* i. p. 253. no. 3676 (1869).
Turdus chrysolaus, *Temm., apud Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 101 (1870).
Geocichla obscura (*Gmel.*), *Jerdon, Ibis*, 1872, p. 136.
Turdulus pallens (*Pall.*), *Godw.-Aust. J. A. S. Beng.* xliii. pt. 2, p. 178 (1874).

In the *adult male* the general colour of the upper parts is olive-brown, tinged with grey on the crown and nape; lores very dark brown; ear-coverts slaty brown; eye-stripe white, extending nearly to the nape; wings, wing-coverts, and tail brown, the outer webs of each feather olive-brown, greyer on the margins of the primaries and primary-coverts; outside tail-feathers obscurely tipped with white on the inner web. Throat and cheeks slaty brown, shading into olive-brown on the breast and into pale chestnut-brown on the flanks, leaving the belly white; under tail-coverts white, with the basal half edged with brown; axillaries and under wing-coverts pale slate-grey, obscurely tipped with white; inner margin of quills pale brown. Bill with the upper mandible dark brown; under mandible pale yellow, darker towards the tip. Wing

with the third primary longest, second primary between the fourth and fifth, bastard primary 0·6 to 0·5 inch. Legs, feet, and claws pale brown. Length of wing 5·0 to 4·4 inches, tail 3·6 to 3·0, culmen 0·88 to 0·78, tarsus 1·26 to 1·1.

The *female* differs from the male in not having the slaty tint on the crown, nape, and sides of the head; the throat is white, obscurely streaked with brown, and the flanks are very slightly suffused with pale chestnut-brown. In spring the general colour of the upper parts has faded from russet-brown into a greyer brown, which becomes still more grey during summer.

Birds of the year do not entirely lose the marks of immaturity until their second autumn moult; the wing-coverts and innermost secondaries frequently retain the pale tips, though these are white rather than ochraceous; the throat and eye-stripe of the female are much suffused with ochraceous, and the throat of the male resembles that of the adult female.

Young in first plumage have most of the feathers of the upper parts with pale ochraceous shafts; the feathers of the back have traces of dark-brown terminal bars, and the wing-coverts and innermost secondaries have pale ochraceous tips to the outside webs; on the underparts the feathers of the cheeks and breast have dark-brown tips, which become less conspicuous on the flanks; the throat and eye-stripe are suffused with ochraceous.

The Dark Ouzel breeds in East Siberia, between lat. 63° and 67°, in the valley of the Yenesay, and further east in the pine-region of Lake Baical and the valley of the Amoor; it passes through China and Mongolia on migration, and winters in Assam, Malacca, and the islands of the Malay archipelago. Stragglers occasionally are found as far west as Turkestan, Nepal, and Europe.

a. ♀ ad. sk.	Yenesay, lat. 66½°, June 27, 1877.	Henry Seebohm, Esq. [P.].
b. Ad. sk.	Nagasaki, Japan.	Capt. St. John [C.].
c. Imm. sk.	Amoy (*R. Swinhoe*).	F. Godman and O. Salvin, Esqrs. [P.].
d, *e*. ♂ ♀ ad. sk.	Labuan, Borneo.	Hugh Low, Esq. [C.].
f. *g*. Imm. sk.	Labuan, Borneo.	Hugh Low, Esq. [C.].
h. Imm. sk.	Labuan, Borneo.	Governor Ussher [C.].
i. ♀ ad. sk.	Malacca.	A. R. Wallace, Esq. [C.].
k, *l*. ♂ ad.; *m*. Imm. sk.	Malacca (*Cantor*).	India Museum.
n. Imm. sk.	Malacca.	W. Harvey, Esq. [C.].
o. Imm. sk.	Malacca.	Eyton Coll. (Type of *Turdus modestus*, Eyton.)
p. Imm. sk.	Penang (*Cantor*).	India Museum.
q. Imm. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
r. Ad. sk.	Philippine Islands.	Hugh Cuming, Esq. [P.].

47. Merula pallida.

Pale Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 32 (1783).
Turdus pallidus, *Gmel. Syst. Nat.* i. p. 815 (1788) (*ex Lath.*); *Lath. Ind. Orn.* i. p. 334 (1790); *Gould, B. Eur.* ii. pl. 80 (1837); *Keys. u. Blas. Wirb. Eur.* pp. li, 178 (1840); *Gray, Gen. B.* i. p. 218

(1847); *Bp. C. nsp.* i. p. 273 (1850); *Gray, Hand-l. B.* i. p. 256. no. 3723 (1869); *Swinhoe, P. Z. S.* 1871, p. 306; *Blyth & Wald. B. Burm.* p. 99 (1875); *Godw.-Aust. J. A. S. Beng.* xlv. pt. 2, p. 196 (1876); *Tacz. Bull. Soc. Zool. France*, 1876, p. 149; *David et Oust. Ois. Chine*, p. 151 (1877); *Hume & Davison, Stray Feath.* vi. p. 253 (1878); *Blakiston & Pryer, Ibis*, 1878, p. 240.

Turdus daulias, *Temm. Pl. Col.* no. 515 (1831); *Gray, Gen. B.* i. p. 219 (1847); *Temm. et Schl. Faun. Japon., Aves*, p. 62, pl. xxvi. (1847); *Swinhoe, Ibis*, 1860, p. 56.

Turdus advena, *Swinhoe, Ibis*, 1860, pp. 56, 358.

In the *adult male* the general colour of the upper parts is rich russet-brown, tinged with grey on the head; lores very dark brown; ear-coverts brown; no trace of eye-stripe; wings brown, the primaries, primary-coverts, and bastard wing-feathers with the outer webs slate-grey the secondaries, greater, median, and lesser wing-coverts with the outer webs russet-brown. Tail dark brown, the outer webs of each feather margined with olive-brown; inner web of outside tail-feathers white for half an inch at the tip; inner web of second outside tail-feather on each side with rather less white at the tip; more or less white at the tip of the third outside tail-feather on each side. Throat and cheeks, breast and flanks slate-grey, shading into white on the belly and the centre of the breast, and more or less irregularly shaded with brown on the lower throat, sides of the breast, and flanks; under tail-coverts white, with the basal half edged with brown; axillaries and under wing-coverts pale slate-grey, obscurely tipped with white; inner margin of quills pale slaty brown. Bill dark brown, yellow at the base of the under mandible. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·75 to 0·5 inch. Legs, feet, and claws pale brown. Length of wing 5·1 to 4·7 inches, tail 3·9 to 3·3, culmen 1·0 to 0·9, tarsus 1·2 to 1·15.

The *female* differs from the male in having the parts which are slate-grey replaced by russet-brown, and in having the centre of the throat greyish white, and the cheeks and sides of the throat with brown fan-shaped terminal spots. *Males of the year* have the plumage of the female, and the greater wing-coverts with more or less conspicuous pale tips. *Young in first plumage* are unknown.

The Pale Ouzel breeds in the valley of the Lower Amoor and in Japan, and winters in South China and Formosa, occasionally straggling as far west as Assam.

a. ♀ ad. sk.	Yokohama.	H. Pryer, Esq. [C.].
b. ♀ ad. sk.	Amoy.	R. Swinhoe, Esq. [C.].
c, *d*. ♂, ♀ ad. sk.	Japan (*Pryer*).	Henry Seebohm, Esq. [P.].

48. Merula chrysolaus.

Turdus chrysolaus, *Temm. Pl. Col.* ii. pl. 537 (1831); *Temm. et Schleg. Faun. Japon., Aves*, p. 64, pl. xxviii. (1847); *Bp. Consp.* i. p. 273 (1850); *Licht. Nomencl. Av.* p. 25 (1854); *Swinhoe, Ibis*, 1860, p. 56; *Schrenck, Reis. u. Forsch. Amur.* i. p. 352 (1860); *Sclater, Ibis*, 1863, p. 197; *Swinhoe, Ibis*, 1863, p. 276; *id.*

P. Z. S. 1863, p. 280; *Gray, Hand-l. B.* i. p. 256. no. 3724 (1869); *Swinh. Ibis*, 1870, p. 248; *id. P. Z. S.* 1871, p. 367; *David et Oust. Ois. Chine*, p. 152 (1877); *Blakiston & Pryer, Ibis*, 1878, p. 241.

Turdus chrycolaus, *Temm. Pl. Col.* ii. text to pl. 537 (1831).

Turdus chrysolotus, *Temm., fide Gray, Gen. B.* i. p. 219 (1847).

In the *adult male* the general colour of the upper parts is russet-brown, tinged with grey on the head; lores very dark brown; ear-coverts brown; scarcely a trace of eye-stripe; wings brown, the primaries, primary-coverts, and bastard wing-feathers with the outer webs slaty brown; the secondaries, greater, median, and lesser wing-coverts with the outer webs russet-brown; tail brown, the outer webs of each feather margined with olive-brown; inner web of the outside tail-feathers narrowly margined with white. Throat and cheeks sooty brown, shading into chestnut-brown on the breast, and into deep rich chestnut on the flanks, leaving the belly white; under tail-coverts white, with the basal half edged with brown; axillaries and under wing-coverts edged with pale slate-grey, obscurely tipped with white; inner margin of quills pale slaty brown. Bill dark brown, yellow at the base of the under mandible. Wings with the third and fourth primaries nearly equal and longest, second primary between the fourth and fifth, or fifth and sixth, bastard primary 0·7 to 0·65 inch. Legs, feet, and claws pale brown. Length of wing 5·0 to 4·6 inches, tail 3·6 to 3·1, culmen 0·89 to 0·75, tarsus 1·3 to 1·15.

The *female* has no grey on the head or wings; the upper throat is nearly white, and the feathers of the cheeks and the centre of the throat are white, with dark brown fan-shaped terminal spots. *Males of the year* resemble females. *Young in first plumage* are unknown.

The Brown Japanese Ouzel appears to be confined to Japan during the breeding-season, frequenting both islands. In autumn it occasionally strays to the valley of the Amoor, and winters in South China, Hainan, and Formosa, occasionally straying as far south as Luzon in the Philippines.

a. ♂ ad. sk.	Amoy, April 10, 1858.	R. Swinhoe, Esq. [C.].
b. ♀ imm. sk.	Formosa, April 1863 (*R. Swinhoe*).	F. Godman and O. Salvin, Esqrs. [P.].
c. ♂ imm. sk.	Yokohama, Japan.	H. Pryer, Esq. [P.].
d. ♂ imm. sk.	Yokohama, Feb. 20, 1870 (*Capt. Conrad*).	R. B. Sharpe, Esq. [P.].
e. ♂ ad. sk.	Hakodadi.	Mr. H. Whitely [C.].
f. ♀ ad. sk.	Japan.	C. Maries, Esq. [C.].
g. Imm. st.	Japan.	Purchased.

49. **Merula xanthopus***.

Turdus xanthopus, *Forster, MS. Drawings (in the Brit. Mus.) of*

* The following supposed species may be a near ally of this bird:—

MERULA ULIETENSIS. (Plate XVI.)

Bay Thrush, *Lath. Gen. Syn.* ii. p. 35 (1783).

$\frac{5}{7}$

J. G. Keulemans del. Mintern Bros. imp.

Merula ulietensis.

Birds obtained during Capt. Cook's voyages, undè Licht. Forster's Descr. Anim. It. Mar. Austr. p. 266 (1844); *Gray, Hand-l. B.* i. p. 255. no. 3709 (1869); *Layard, Ibis*, 1878, p. 253; *Tristram, Ibis*, 1879, p. 188.

Merula xanthopus (*Licht.*), *E. P. Ramsay, P. L. Soc. N. S. Wales*, iii. p. 337 (1879).

In the *adult male* the general colour of the upper parts, including the lores and ear-coverts, is an almost uniform dark brown, becoming dull black on the head, wings, and tail; no trace of eye-stripe. Underparts dark brown, paler and greyer on the chin, throat, and thighs. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·9 to 0·7 inch. Legs, feet, and claws pale yellow. Length of wing 4·55 to 4·3 inches, tail 3·45 to 3·2, culmen 1·1 to 0·9, tarsus 1·36 to 1·3.

The *female* differs from the male in having a shade of olive on the colour of the back, and in having the dark brown of the underparts replaced by dark vinous brown. *Young in first plumage* are unknown; but an *immature male* shows traces of first plumage in the chestnut tips to some of the wing-coverts; in other respects the plumage very closely resembles that of the adult female.

The New-Caledonian Ouzel is only known from the island whose name it bears.

a, *b*. ♂ ad. sk. New Caledonia. J. Macgillivray, Esq. [C.].

50. **Merula vinitincta.**

Merula vinitincta, *Gould, P. Z. S.* 1855, p. 165; *E. P. Ramsay, P. L. Soc. N. S. Wales*, iii. p. 337 (1879).

Turdus vinotinctus (*Gould*), *Sclater, Ibis*, 1861, p. 281.

Turdus vinitinctus (*Gould*), *Gray, Hand-l. B.* i. p. 255. no. 3711 (1869).

Turdus xanthopus, *Licht. apud Tristram, Ibis*, 1879, p. 188 (*partim*).

General colour of the upper parts russet-brown, slightly more russet on the upper tail-coverts; head, nape, lores, and ear-coverts dark brown, well defined from the back; no trace of eye-stripe; wings and tail brown; the outside web of the wing-coverts, innermost secondaries, and quills russet-brown. Underparts dark vinous

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Turdus ulietensis, *Gmel. Syst. Nat.* i. p. 815 (1788, *ex Lath.*); *Lath. Ind. Orn.* i. p. 335 (1790); *Gray, Gen. B.* i. p. 219 (1847); *id. B. Trop. Isl.* p. 16 (1859); *id. Hand-l. B.* i. p. 255. no. 3713 (1869); *Tristram, Ibis*, 1879, p. 187.

Turdus badius, *Forst. MS. Drawings (in the Brit. Mus.) of Animals obtained during Capt. Cook's voyages, undè Licht. Forster's Descr. Anim. It. Mar. Austr.* p. 239 (1844).

Merula ulietensis (*Gmel.*), *E. P. Ramsay, P. L. Soc. N. S. Wales*, iii. p. 337 (1879).

The Raiatean Ouzel is said to have been obtained in the island of Raiatea, or Ulietea, one of the Society Islands. It is not known that a specimen of this species exists in any museum or private collection. The figure is copied from Forster's drawing in the British Museum.

brown, shading into brown on the chin, upper throat, axillaries, under wing-coverts, thighs, centre of belly, and under tail-coverts. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth or sixth and seventh, bastard primary 0·8 inch. Legs, feet, and claws pale yellow. Length of wing 4·22 to 3·85 inches, tail 3·36 to 2·8, culmen 0·9 to 0·86, tarsus 1·2.

The *female* differs from the male in being slightly paler in colour both above and below. *Birds of the year* and *young in first plumage* are unknown.

Lord Howe's Ouzel is apparently confined to Lord Howe's Island. Its nearest ally is probably *Turdus xanthopus*, from New Caledonia; but the latter is a decidedly larger and darker-coloured species.

a, b. ♂ ♀ ad. sk.	Lord Howe's Island (*J. Macgillivray*).	Geological Museum [P.].

51. Merula vitiensis.

Merula vitiensis, *Layard, Ann. Nat. Hist.* 1876, xvii. p. 305; *id. Ibis*, 1876, pp. 390, 392; *E. P. Ramsay, P. L. Soc. N. S. Wales*, iii. p. 337 (1879).
Turdus vitiensis (*Layard*), *Tristram, Ibis*, 1879, p. 188.

In the *adult male* the forehead, lores, and crown of the head are dark brown; no trace of eye-stripe; ear-coverts and sides of the neck grey, shading on the nape into dark olive-brown, which is the general colour of the upper parts; wings and tail brown; the outer web of the wing-coverts, innermost secondaries, and quills dark olive-brown. Chin and throat creamy grey, shading into brownish grey on the breast; the rest of the underparts rich deep chestnut, shading into nearly white on the centre of the belly; axillaries and under wing-coverts brownish grey, with obscure chestnut edges; under tail-coverts brown, with pale chestnut-brown tips and shafts. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·85 to 0·7 inch. Legs, feet, and claws pale yellow. Length of wing 4·6 to 4·25 inches, tail 3·3 to 2·85, culmen 0·92 to 0·88, tarsus 1·5 to 1·41.

The *female* differs from the male in having the rich deep chestnut of the belly replaced by dull chestnut. The seasonal changes are probably very slight. The plumage of *birds of the year* is unknown. *Young in first plumage* have ochraceous shaft-lines and obscure black terminal bars to the feathers of the back, and fan-shaped ochraceous tips to the wing-coverts; the underparts are ochraceous, most feathers having a very conspicuous black terminal bar.

The Viti-Levu Ouzel is confined to the island from which it takes its name, one of the Fiji Islands.

a, b. ♂ ♀ ad. sk.	Interior of Viti Levu (*Kleinschmidt*).	Godeffroy Museum.

52. Merula javanica.

Turdus javanicus, *Horsfield, Trans. Linn. Soc.* xiii. p. 148 (1822); *Blyth, J. A. S. Beng.* xvi. p. 143 (1847); *Gray, Gen. B.* iii. *App.* p. 10 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 196 (1854); *Sclater, Ibis*, 1861, p. 280; *Gray, Hand-l. B.* i. p. 255. no. 3705 (1869); *Salvad. Ucc. Born.* p. 257 (1874); *Sclater, Ibis*, 1875, p. 344, pl. viii.

Turdus (Merula) fumidus, *S. Müller, Verh. Nat. Gesch. Nederl.* p. 201 (1839).

Turdus hypopyrrhus, *Hartl. Verz. Brem. Samml.* p. 43 (1844); *Gray, Gen. B.* i. p. 219 (1847); *Cab. Mus. Hein.* i. p. 3 (1850); *Salvad. Ucc. Born.* p. 258 (1874).

Turdus concolor, *Temm., fide Blyth, J. A. S. Beng.* xvi. p. 143 (1847).

Turdus fumidus (*Müll.*), *Gray, Gen. B.* i. p. 219 (1847); *Bp. Consp.* i. p. 274 (1850).

Turdus nigricrissus, *Schiff, fide Bp. Compt. Rend.* xxxviii. p. 6 (1854).

Turdus schlegeli, *Sclater, Ibis*, 1861, p. 280; *Wallace, P. Z. S.* 1863, p. 485; *Sclater, Ibis*, 1875, p. 347.

In the *adult male* the general colour of the upper parts is a uniform dark brown, approaching chocolate-brown, obscurely suffused with dark olive on the back. This colour pervades the entire head, neck, breast, axillaries, under wing-coverts, and thighs, leaving the belly and flanks chestnut, marked with white on the centre of the belly and vent; the under tail-coverts are the same uniform dark brown, with broad white shaft-lines and tips. Bill yellow. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·85 to 0·7 inch. Legs, feet, and claws yellow. Length of wing 4·76 to 4·4 inches, tail 3·91 to 3·4, culmen 0·91 to 0·82, tarsus 1·35 to 1·25.

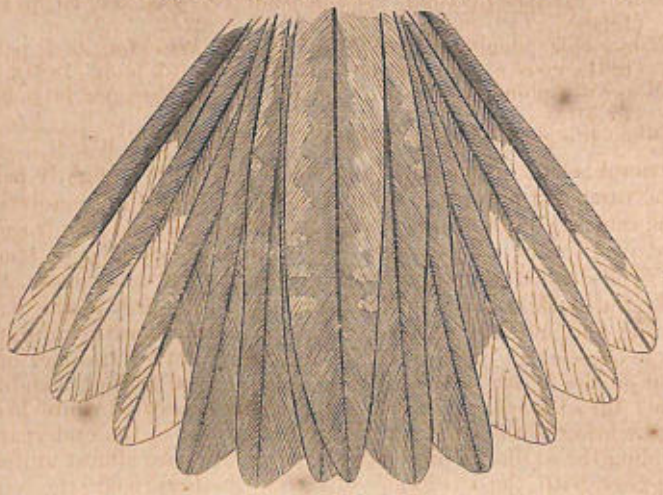
The *female* differs from the male in being of a paler brown; the chestnut of the belly is replaced by brown, the white on the vent is nearly obsolete, and the white on the under tail-coverts is confined to a narrow shaft-line. *Young in first plumage* have pale shaft-lines and dark terminal bars to the feathers of the back and under-parts, and the wing-coverts have ochraceous tips; the under tail-coverts agree with those of the female. The type of *T. javanicus* and that of *T. schlegeli* agree in the colour of the under tail-coverts, but the latter has the rich chestnut flanks of the adult male. It is probably an immature male.

Horsfield's Ouzel appears to be resident in the islands of Java, Sumatra, Borneo, and Timor.

a. Ad. st.	Java.	East-India Co.
b. Ad., *c*. Juv. sk.	Java (*Horsfield*).	India Museum. (Types of *Turdus javanicus*, Horsf.)
d. ♂ ad. sk.	W. Java.	A. R. Wallace, Esq. [C.].
e. Ad. sk.	Borneo.	Purchased.

4. MIMOCICHLA, *Sclater*.

	Type.
Mimocichla (subgenus), *Sclater*, *P. Z. S.* 1859, p. 336 ..	M. rubripes.
Mimokitta, *Bryant*, *Pr. Bost. Soc.* ix. p. 371 (1865)	M. bryanti.
Mimocitta, *Newton*, *Ibis*, 1866, p. 121 *e*.....	M. bryanti.



Tail of *Mimocichla ardesiaca*.

The genus *Mimocichla* is a very small one, nearly allied to *Turdus* and *Merula*, but differing from them in having a much more rounded tail, with the three or four outside feathers on each side white at the tips for a considerable distance on the inside web. They are also remarkable for the broad pale borders to the secondaries and wing-coverts. The bill is slightly more slender than usual among the Thrushes, and the rictal bristles are small. The bastard primary is small, and the second primary considerably longer than the secondaries. The legs are pale in colour, and the tarsus unscutellated.

These birds frequent dense thickets, and are good songsters, and appear to be all residents in the West-India islands.

Key to the Species.

a. Throat black.
  a'. Belly slate-colour ..... *bryanti*, p. 280.
  b'. Belly chestnut ..... *rubripes*, p. 283.
b. Throat white, streaked with black ..... *ardesiaca*, p. 282.

1. Mimocichla bryanti*.

Turdus plumbeus, *Linn. Syst. Nat.* p. 169 (1758).
Le Merle cendré d'Amérique, *Briss. Orn.* ii. p. 288 (1760, *partim*).

* The name of *Mimocichla plumbea* cannot be used for either this or the next species, having been indiscriminately applied to both. Linnæus

Le Tilly, ou la Grive cendrée d'Amérique, *Montb. Hist. Nat. Ois.* iii. p. 314 (1775, *partim*).
Red-legged Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 33 (1783, *partim*).
Turdus plumbeus, *Linn.*, ♂, *apud Gmel. Syst. Nat.* i. p 814 (1788), *apud Lath. Ind. Orn.* i. p. 334 (1790).
Mimus rubripes (*Temm.*), *apud Bryant, Pr. Bost. Soc.* vii. p. 114 (1859).
Mimocichla plumbea (*Linn.*), *apud Baird, Rev. Am. B.* i. p. 36 (1864), *apud Cory, Birds Bahama Islands*, p. 45, pl. ii. (1880).
Mimokitta plumbea (*Linn.*), *apud Bryant, Pr. Bost. Soc.* ix. p. 371 (1865).
Mimocitta plumbea (*Linn.*), *apud Newton, Ibis*, 1866, p. 121.

General colour of the upper parts dark slate-grey, slightly paler on the rump and upper tail-coverts, the feathers on the head darker in the centres; lores nearly black; ear-coverts as head; no trace of eye-stripe; quills, wing-coverts, and innermost secondaries black, with well-defined slate-grey margins to the outside edges; tail black, the outside webs shading into dark slate-grey at the base, and the four outside feathers on each side tipped with white, the outside ones for an inch, gradually decreasing until it becomes only a spot on the fourth feather. Chin and cheeks at base of mandible white; throat black, the upper feathers with concealed white bases and the lower with slate-grey margins; the rest of the underparts, including the axillaries and under wing-coverts, are almost uniform slate-grey, with the exception of a few feathers near the vent, which have white tips; inner margin of quills slate-grey. Bill black. Wing with the fourth and fifth primaries nearly equal and longest, the second primary intermediate in length between the seventh and eighth. Legs, feet, and claws orange. Tail with the outside feathers 0·5 to 0·6 inch shorter than the longest. Length of wing 4·95 to 4·4 inches, tail 4·65 to 4·35, culmen 1·1 to 1·05, tarsus 1·45, bastard primary 1·15 to 1·0.

The *female* does not differ from the male. *Birds of the year* and *young in first plumage* appear to be unknown.

The Bahaman Mocking-bird Thrush is only known from the

named this species *Turdus plumbeus* in his tenth edition. He appears subsequently to have made the acquaintance of the following species, and to have come to the erroneous conclusion that he had been misled in the information which he embodied in his diagnosis of the present species. In the twelfth edition he accordingly altered his diagnosis of *Turdus plumbeus* to suit the new species. This conclusion was accepted by ornithologists, Gmelin attempting to cut the Gordian knot by making the black-throated species the male and the striped-throated species the female. During the next century no second example of the so-called male was discovered, and it was found that the so-called females were of both sexes. Gmelin's plausible theory was consequently found to be a case in which argument by analogy proved fallacious, and the *Turdus plumbeus* of the tenth edition of Linneus was voted a phantom species. Here, again, argument by analogy proved erroneous, for, after the lapse of one hundred and six years, the supposed phantom species was rediscovered by Bryant. I have, for obvious reasons, rejected the name which has been applied to both species altogether, and have adopted Vieillot's name for the striped-throated species. The black-throated species being thus left nameless, I have great pleasure in naming it after its rediscoverer.

Bahama Islands in the West Indies, being especially abundant on New Providence and Abaco.

The British Museum does not possess an example of this species. Skins are in the collections of Dr. Sclater, Messrs. Salvin and Godman, and in my own.

2. Mimocichla ardesiaca.

Le Merle cendré d'Amérique, *Briss. Orn.* ii. p. 288 (1760, *partim*); *Daubent. Pl. Enl.* no. 560. fig. i. (1775).
Turdus plumbeus, *Linn. Syst. Nat.* i. p. 294 (1766).
Le Tilly, ou la Grive cendrée d'Amérique, *Montb. Hist. Nat. Ois.* iii. p. 314 (1775, *partim*).
Red-legged Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 33 (1783, *partim*).
Turdus plumbeus, *Linn.*, ♀, *apud Gmel. Syst. Nat.* i. p. 814 (1788), *apud Lath. Ind. Orn.* i. p. 334 (1790).
Turdus plumbeus, *Linn.*, *Vieill. Hist. Nat. Ois. de l'Amér. sept.* ii. p. 2, pl. lviii. (1807); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 242 (1818).
Turdus ardosiaceus, *Vieill. Encyclop. Méth.* p. 646 (1823).
Mimus plumbeus (*Linn.*), *Gray, Gen. B.* i. p. 221 (1847); *Bp. Consp.* i. p. 276 (1850).
Galeoscoptes plumbeus (*Linn.*), *Cab. Mus. Hein.* i. p. 82 (1850); *Sclater, P. Z. S.* 1857, p. 231; *id. P. Z. S.* 1859, p. 337.
Mimocichla ardosiacea (*Vieill.*), *Baird, Rev. Am. B.* i. p. 39 (1864); *Gundlach, Journ. Orn.* 1878, p. 465.
Mimocichla ardesiaca (*Vieill.*), *Scl. & Salv. Nomencl. Av. Neotr.* p. 2 (1873).

General colour of the upper parts slate-grey, the feathers on the head with black centres; lores black; ear-coverts slate-grey; no trace of eye-stripe; wings, wing-coverts, and innermost secondaries dark brown, broadly edged on the outside web with slate-grey; tail-feathers nearly black, edged on the outside web with slate-grey; outer tail-feathers very broadly tipped with white, the two next on each side less broadly so, and the two next only spotted at the tips. Chin and upper throat white, each feather having a fan-shaped terminal black spot; the rest of the underparts pale slate-grey, shading into white on the centre of the belly and under tail-coverts; axillaries and under wing-coverts slate-grey; inner margin of quills pale slaty brown. Bill yellow above and below. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary between the seventh and eighth, bastard primary 1·2 to 1·1 inch. Legs, feet, and claws coral-red. Tail with the outside feathers 0·4 to 0·6 inch shorter than the longest. Length of wing 5·05 to 4·9 inches, tail 4·6 to 4·0, culmen 1·1 to 1·06, tarsus 1·52 to 1·5.

The *female* does not differ from the male except in being slightly smaller. *Young in first plumage* are browner in colour, and have ochraceous tips to the wing-coverts; the feathers of the breast are slate-grey, with ochraceous shaft-lines and dark tips.

The St.-Domingo Mocking-bird Thrush appears to be confined to the islands of Porto Rico and St. Domingo, where it is a resident.

a. Ad. sk. Porto Rico (*Dr. Bryant*). Mrs. Bryant [P.].

3. Mimocichla rubripes.

Turdus rubripes, *Temm. Pl. Col.* ii. no. 409 (1826); *Vigors, Zool. Journ.* iii. p. 439 (1827); *Sagra, Cuba, Ois.* p. 48, pl. iv. (1839); *Gundlach, Bost. Journ.* vi. p. 318 (1852).
Mimus rubripes (*Temm.*), *Bp. Consp.* i. p. 276 (1850).
Galeoscoptes rubripes (*Temm.*), *Cab. Mus. Hein.* i. p. 82 (1850); *id. Journ. Orn.* 1855, p. 470; *Sclater, P. Z. S.* 1859, p. 336.
Mimocichla rubripes (*Temm.*), *Sclater, Cat. Amer. B.* p. 2 (1862); *Baird, Rev. Am. B.* i. p. 38 (1864); *Gundlach, Journ. Orn.* 1872, p. 406.
Mimocichla schistacea, *Baird, Rev. Am. B.* i. p. 37 (1864); *Gundlach, Journ. Orn.* 1872, p. 407.

General colour of the upper parts dark slate-grey, slightly paler on the rump and upper tail-coverts, the feathers on the head darker in the centre; lores and ear-coverts nearly black; no trace of eye-stripe; quills, wing-coverts, and innermost secondaries black, margined on the outside webs with slate-grey; tail black, the outside webs shading into dark slate-grey at the base, and the four outside feathers on each side more or less broadly tipped with white. Chin and cheeks white; throat black, the upper feathers with concealed white bases, and the lower with slate-grey margins; breast and upper part of the belly and flanks slate-grey; lower part of the belly and flanks and thighs chestnut; under tail-coverts white; axillaries and under wing-coverts slate-grey; inner margin of quills slate-grey. Bill black. Wing with the fourth and fifth primaries nearly equal and longest, second primary between the seventh and eighth. Legs, feet, and claws yellow. Tail with the outside feathers 0·55 to 0·6 inch shorter than the longest. Length of wing 4·9 to 4·45 inches, tail 4·4 to 4·12, culmen 1·05 to 1·0, tarsus 1·55 to 1·4, bastard primary 1·15 to 1·0.

The Cuban Mocking-bird Thrush appears to be confined to the island of Cuba.

The British Museum does not possess an example of this species; but skins are in the collections of Dr. Sclater, Messrs. Salvin and Godman, and in my own.

5. CATHARUS.

Type.

Catharus, *Bonap. Consp. Av.* i. p. 278 (1850)..... C. aurantiirostris.

The genus *Catharus* forms a connecting-link between the Thrushes and the Robins; indeed *C. gracilirostris* is a typical *Erithacus*, so far as what are called structural characters are concerned; in general style of coloration, however, it so closely resembles the other Neotropical species, that it is probably more nearly related to them than to its Japanese cousins. The bill varies from very slender and black, through rather slender with pale under mandible, to stout, pale brown, yellow or orange; the rictal bristles are slender, and frequently almost obsolete. The tail consists of twelve feathers, and is slightly rounded. The wing varies considerably, some being much

more rounded than others—in some species the bastard primary being small, in others about half the length of the second. The legs vary in colour from yellow to brown, and the tarsus is not scutellated.

None of the species are known to be migratory. They frequent forests, where they are described as seeking their food on the ground. They are fair songsters.

Three species are found in South Mexico, one of which ranges as far south as Costa Rica and one to Panama. One species is peculiar to Guatemala. Two species are peculiar to Costa Rica, and another ranges from Costa Rica to Ecuador. One species is peculiar to Panama, two to Colombia, one to Venezuela, and one to Bolivia.

Key to the Species.

a. Head black or grey.
  a'. General colour of upper parts nearly uniform dark slate-grey.
    a''. Throat slate-grey ..... *fuscater*, p. 285.
    b''. Throat brownish grey ..... *mentalis*, p. 285.
  b'. Back russet- or olive-brown.
    c''. Head black ..... *mexicanus*, p. 286.
    d''. Head grey.
      a'''. Bill slender, both mandibles black .. *gracilirostris*, p. 292.
      b'''. Bill stout, under mandible pale.
        a^1. Back dark olive-brown ..... *phæopleurus*, p. 287.
        b^1. Back russet-brown ..... *griseiceps*, p. 287.
b. Head russet-brown, sometimes suffused with olive.
  c'. Back olive-brown.
    e''. Head russet-brown ..... *alticola*, p. 291.
    f''. Head olive-brown..... *aurantiirostris*, p. 289.
  d'. Back russet-brown.
    g''. Outer web of wing-coverts rusty brown . *melpomene*, p. 288.
    h''. Outer web of wing-coverts russet-brown as back.
      c'''. Chin and throat pale olive-brown, with obscure darker spots ..... *occidentalis*, p. 291.
      d'''. Chin and throat pale slate-grey, nearly uniform.
        c^1. Head nearly uniform in colour with the back ..... *birchalli*, p. 289.
        d^1. Head much more chestnut than the back ..... *frantzii*, p. 290.

[Catharus fuscater and Catharus mentalis.]

I am unable to decide, with the small series of South-American skins at my command, whether these very closely allied forms are specifically or subspecifically distinct. In my opinion the balance of evidence available is slightly in favour of their being conspecific. The northern form is more decidedly slate-grey in colour on the chin, throat, wings, and tail, which are more or less suffused with olive-brown in the allied species.

1. Catharus fuscater.

Myioturdus fuscater, *Lafresn. Rev. Zool.* 1845, p. 341.
Grallaria fuscatra (*Lafr.*), *Gray, Gen. B.* i. p. 213 (1846).
Chamæza fuscater (*Lafr.*), *Bp. Consp.* i. p. 204 (1850).
Catharus fuscater (*Lafr.*), *Sclater, P. Z. S.* 1859, p. 324; *Salvin, P. Z. S.* 1867, p. 132; *Lawr. Ann. Lyc. N. Y.* ix. p. 90 (1868); *Salvin, P. Z. S.* 1870, p. 180; *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 5 (1879).
Turdus fuscater (*Lafr.*), *Gray, Hand-l. B.* i. p. 259. no. 3782 (1869).

In the *adult male* and *female* the head, lores, and ear-coverts are black; quills dark brown, approaching black; the rest of the upper parts dark slate-grey, approaching black. Underparts pale slate-grey, shading into nearly white on the belly; inner margin of quills brown; the amount of white on the belly varies, and is almost entirely absent in a skin in Salvin and Godman's collection, said to be from Ecuador. Bill yellow, the upper mandible frequently dark brown. Wings with the fourth and fifth primaries nearly equal and longest, second primary about equal to the ninth, bastard primary 1·15 to 0·9 inch, sometimes more and sometimes less than half the length of the second primary. Legs, feet, and claws pale brown. Length of wing 3·6 to 3·35 inches (females 3·3 to 3·1), tail 3·05 to 2·7 (females 2·75 to 2·4), culmen 0·75 to 0·7, tarsus 1·4 to 1·3.

There is no difference in the colour of the plumage of the sexes, but, as will be seen from the measurements given above, the females have shorter tails. *Birds of the year* and *young in first plumage* are unknown. Examples from Ecuador average shorter in the wing than those from Veragua, but longer in the tail; they are also paler on the underparts, especially on the chin and throat.

The Colombian Thrush-Robin is a resident in the highland forests of Colombia, its range extending northwards to Panama and Costa Rica, and southwards into Ecuador.

a. Ad. sk.	Ecuador, 1859 (*Fraser*).	Eyton Coll.
b. Ad. sk.	Quito, Ecuador (*Jameson*).	J. Gould, Esq.
c. ♂ ad. sk.	Veragua (*Arcé*).	H. Seebohm, Esq. [P.]

2. Catharus mentalis.

Catharus mentalis, *Scl. & Salv. P. Z. S.* 1876, p. 352; *iid. P. Z. S.* 1879, p. 591.

In the *adult male* the general colour of the upper parts, including the lores, is a dark brown approaching black, suffused with dark olive-brown on the margins of the outer webs of the quills and tail-feathers and on the entire margin of the remaining feathers. Underparts slate-grey, palest on the centre of the belly, darkest on the axillaries and under wing-coverts, and slightly suffused with olive-brown on the ear-coverts, chin, and throat; inner margin of quills

brown. Bill yellow. Wings with the fourth, fifth, and sixth primaries nearly equal and longest, second primary intermediate in length between the ninth and tenth, bastard primary 1·15 to 1·1 inch, rather more than half the length of the second. Legs, feet, and claws brown. Length of wing 3·35 inches (female 3·2), tail 3·05 to 3·0 (female 2·8), culmen 0·7 to 0·68, tarsus 1·4 to 1·3.

The supposed *female* differs from the male in being somewhat more suffused with dark olive-brown, especially on the head. *Birds of the year* and *young in first plumage* are unknown.

This form agrees in dimensions with the Ecuador form, but slightly differs in colour as described.

The Bolivian Thrush-Robin has only been obtained on one of the forest-clad spurs of the Andes in Eastern Bolivia, where it is believed to be a resident.

3. Catharus mexicanus.

Malacocychla mexicanus, *Bp. Compt. Rend.* lxiii. p. 998 (1856); *Sclater**, *P. Z. S.* 1857, p. 203; *Scl. & Salv.** *Ibis*, 1859, p. 7.

Catharus mexicanus (*Bp.*), *Sclater*, *P. Z. S.* 1859, p. 324; *Baird*, *Rev. Am. B.* p. 11 (1864); *Sclater*, *P. Z. S.* 1864, p. 172; *Salvin*, *P. Z. S.* 1866, p. 69; *Lawr. Ann. Lyc. N. Y.* ix. p. 90 (1868); *Sumichrast*, *Mem. Bost. Soc. N. H.* i. p. 542 (1869); *Salvin*, *P. Z. S.* 1870, p. 179; *Scl. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 6 (1879).

Turdus mexicanus (*Bp.*), *Gray*, *Hand-l. B.* i. p. 259. no. 3784 (1869).

In the *adult male* and *female* the head, nape, lores, and the feathers immediately below and behind the eye are black, slightly suffused with olive-brown on the forehead; the rest of the upper parts dark olive-brown, still darker and browner on the inner webs of the quills and tail-feathers. Underparts, including the ear-coverts, pale slate-grey, very pale on the chin and throat, nearly white on the centre of the belly and under tail-coverts, and more or less suffused with dark olive-brown on the axillaries, under wing-coverts, sides of the breast, and flanks; inner margin of quills palish brown. Bill with the upper mandible dark brown, and the lower mandible yellow. Wing with the fourth and fifth primaries nearly equal and longest, second primary intermediate in length between the seventh and eighth, bastard primary 0·9 to 0·75 inch, about a third the length of the second. Legs, feet, and claws pale yellow. Length of wing 3·5 to 3·25 inches, tail 2·5 to 2·35, culmen 0·7 to 0·65, tarsus 1·35 to 1·25.

It is not known that the *female* differs from the male. In what I take to be *birds of the year*, the quills and tail-feathers are almost the same colour as the back, the black of the head is suffused with olive-brown, and the pale slate-grey of the underparts is replaced by pale brown. *Young in first plumage* are unknown.

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* Spelt *Malacocichla mexicana*.

The Black-headed Central-American Thrush-Robin is a resident of the forests of South Mexico, Guatemala, Costa Rica, and Panama, and is said to rarely ascend more than 3000 feet above the level of the sea.

a. Ad. sk. Guatemala. J. Gould, Esq.

[Catharus griseiceps and Catharus phæopleurus.]

These two forms are very closely allied, but may perhaps be fairly entitled to specific rank, as, so far as we know at present, the slight differences between them are coincident with slight variation of geographical distribution. The Panama form has the back russet-brown, and the Colombian form olive-brown.

4. Catharus griseiceps.

Catharus griseiceps, *Salvin, P. Z. S.* 1866, p. 68, 1867, p. 132, and 1870, p. 179; *Sclat. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 6, pl. i. fig. 2 (1879).

Turdus griseiceps (*Salv.*), *Gray, Hand-l. B.* i. p. 259. no. 3777 (1869).

In the *adult male* the head, nape, and lores are brownish slate-grey; the rest of the upper parts are almost uniform russet-brown; inner webs of quills brown. Underparts, including the axillaries and under wing-coverts, palish slate-grey, shading into nearly white on the centre of the belly and under tail-coverts; inner margin of quills pale brown. Bill yellow. Wings with the fourth and fifth primaries nearly equal and longest, second primary intermediate in length between the eighth and ninth, bastard primary 1·1 to 0·95 inch, about half the length of the second. Legs, feet, and claws yellow. Length of wing 3·35 to 3·0 inches, tail 2·6 to 2·4, culmen 0·72 to 0·65, tarsus 1·25 to 1·2.

In the *female* the slate-grey of the head is replaced by dark russet-brown. *Males of the year* probably resemble the female. *Young in first plumage* are unknown.

The Panama Thrush-Robin has only been obtained from the highlands of Panama, where it is a resident.

a. ♂ ad. sk. Veragua (*Arcé*). H. Seebohm, Esq. [P.].

5. Catharus phæopleurus.

Catharus phæopleurus, *Sclat. & Salv. P. Z. S.* 1875, p. 541, and 1879, p. 491.

In the *adult male* and *female* the general colour of the upper parts is olive-brown, shading into slate-grey on the head, and into russet-brown on the upper tail-coverts; the feathers of the head are obscurely suffused with olive-brown on their margins, and those of the back have obscure margins of paler olive-brown; lores dark

slate-grey; ear-coverts slightly paler; wing-coverts and quills brown on inside web, and russet-brown on outside web; tail russet-brown. General colour of the underparts, including the axillaries and under wing-coverts, pale slate-grey, slightly paler on the chin and throat, and shading into pure white on the centre of the belly; under tail-coverts buff; inner margin of quills pale brown. Bill yellow. Wings with the fourth, fifth, and sixth primaries nearly equal and longest, second primary equal to the eleventh or twelfth, bastard primary 1·1 to 0·95 inch, about half the length of the second. Legs, feet, and claws yellow. Length of wing 3·2 to 3·0 inches, tail 2·51 to 2·41, culmen 0·72 to 0·69, tarsus 1·28 to 1·25.

The *female* is said not to differ from the male. *Birds of the year* and *young in first plumage* appear to be unknown.

The Antioquian Thrush-Robin has only been obtained from the forest highlands of Antioquia, a province of Colombia.

[**Catharus melpomene** and **Catharus aurantiirostris.**]

These two forms are very distinct and inhabit different localities, but appear to me to be connected together by an intermediate form, from an intermediate locality, which is equally entitled to specific rank.

6. Catharus melpomene.

Turdus melpomene, *Cab. Mus. Hein.* i. p. 5 (1850); *Licht. Nomenel. Av.* p. 25 (1854); *Gray, Hand-l. B.* i. p. 259. no. 3775 (1869).
Catharus aurantiirostris, *Hartl. apud Sclater, P. Z. S.* 1856, p. 294.
Catharus melpomene (*Cab.*), *Sclater, P. Z. S.* 1858, p. 97; *Sclat. & Salv. Ibis*, 1859, p. 6; *Sclater, P. Z. S.* 1859, pp. 323, 362, 370; *Cab. Journ. Orn.* 1860, p. 322; *Sclat. & Salv. Ibis*, 1860, p. 29; *Baird, Rev. Am. B.* p. 7 (1864); *Lawr. Ann. Lyc. N. Y.* ix. p. 90 (1868); *Sumichrast, Mem. Bost. Soc. N. H.* i. p. 542 (1869); *Frantz. Journ. Orn.* 1869, p. 289; *Sclat. & Salv. Nomenel. Av. Neotr.* p. 1 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 2 (1879).

In the *adult male* the general colour of the upper parts is russet-brown, approaching coffee-brown on the head, and shading into rusty brown on the upper tail-coverts; lores dull slate-grey; ear-coverts russet-brown; wing-coverts and quills brown on inside web, and rich rusty brown on outside web; tail-feathers russet-brown, margined on the outside webs with rusty brown. General colour of the underparts, including the axillaries, pale slate-grey, slightly paler on the chin and throat, and shading into pure white on the centre of the belly; under tail-coverts suffused with russet-brown; under wing-coverts russet-brown; inner margin of quills pale chestnut-brown. Bill yellow. Wings with the fourth, fifth, and sixth primaries nearly equal and longest, second primary equal to the tenth or eleventh, bastard primary 1·1 to 0·95 inch, about half the length of the second. Legs, feet, and claws yellow. Length of wing 3·1 to 3·0 inches, tail 2·66 to 2·5, culmen 0·72 to 0·61, tarsus 1·27 to 1·2.

The *female* apparently only differs from the male in having the upper mandible a dark horn-colour; in the abraded plumage of summer some of the russet and rusty brown disappears, and the back approaches olive-brown. *Birds of the year* do not differ from adults, except in showing ochraceous tips to some of the median wing-coverts. *Young in first plumage* have pale ochraceous centres and obscure dark terminal bands to the small feathers of the upper parts; the lesser and median wing-coverts have ochraceous tips; and the slate-grey of the underparts is replaced by very pale brown, each feather having a darker brown transverse terminal band.

The Common Central-American Thrush-Robin is a resident in the highlands of the extreme south of Mexico, Guatemala, and Costa Rica. Examples from the latter locality are slightly less russet in the brown of the upper parts, and have the under tail-coverts less suffused with brown.

a, b. Ad. st.	Mexico.	Purchased.

I propose to call the intermediate form

7. Catharus birchalli.

In the general colour of the upper parts this form scarcely differs from *C. melpomene*, except that the rich rusty brown on the outer webs of the wing-coverts is replaced by russet-brown scarcely richer than the back. It is, however, very difficult to separate the least rusty-winged Central-American form from the most rusty-winged Colombian form. From *C. aurantiirostris* this form may be distinguished by the general colour of the upper parts being russet-brown instead of olive-brown, though here again the most rufous examples of *C. aurantiirostris* are scarcely separable from the least rufous examples of the intermediate form. Bill orange. Wing-formula as in *C. aurantiirostris*. Legs, feet, and claws yellow. Length of wing 3·3 to 3·06 inches, tail 2·6 to 2·35, culmen 0·72 to 0·7, tarsus 1·2 to 1·1, bastard primary 1·05 to 0·85.

Birchall's Thrush-Robin has been received from Bogotá and in collections supposed to come from the Oronoco valley.

a, b. Ad. sk.	Oronoco valley.	H. Seebohm, Esq. [P.].

8. Catharus aurantiirostris.

Turdus aurantiirostris, *Hartlaub, Rev. et Mag. Zool.* 1850, p. 158; *Jard. Contr. Orn.* 1850, p. 80, pl. lxxii.
Catharus immaculatus, *Bp. Consp.* i. p. 278 (1850).
Turdus immaculatus, *Bp., fide Bp. Consp.* i. p. 278 (1850).
Catharus aurantiirostris (*Hartlaub*), *Sclater, P. Z. S.* 1859, p. 323; *Sclat. & Salv. Nomencl. Av. Neotr.* p. 1 (1873).

General colour of the upper parts an almost uniform olive-brown, occasionally inclining to russet-brown; lores brown; inner webs of quills and tail-feathers brown. Underparts, including the ear-coverts, axillaries, and under wing-coverts, pale slate-grey, shading into nearly white on the centre of the chin, throat, and belly; under tail-coverts white, occasionally stained with buff; inner margin of quills pale buffish brown. Bill orange. Wings with the fourth, fifth, and sixth primaries nearly equal and longest, second primary equal to the ninth or tenth, bastard primary 0·95 to 0·9 inch, about half the length of the second. Legs, feet, and claws yellow. Length of wing 3·1 to 3·0 inches, tail 2·45, culmen 0·7 to 0·65, tarsus 1·3 to 1·2.

Nothing is known of any differences in the colour of the plumage which may be attributable to *age*, *sex*, or *season*.

The Venezuelan Thrush-Robin is confined to the mountain-ranges of Caracas, where it is supposed to be a resident.

The British Museum does not possess an example of this species; but skins are in the collections of Dr. Sclater and Messrs. Salvin and Godman.

[Catharus frantzii and Catharus alticola.]

I do not think that ornithologists have done right to divide these forms into two species; but, in deference to the opinion of ornithologists who have made a special study of Neotropical birds, I admit them to specific rank, though the same principle carried out in the allied genera would greatly increase the number of recognized species.

9. Catharus frantzii.

Catharus frantzii, *Cab. Journ. Orn.* 1860, p. 323; *Baird, Rev. Am. B.* p. 9 (1864); *Lawr. Ann. Lyc. N. Y.* ix. p. 90 (1868); *Frantz. Journ. Orn.* 1869, p. 289; *Sclat. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Boucard, P. Z. S.* 1878, p. 50; *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 4 (1879).

Turdus frantzii (*Cab.*), *Gray, Hand-l. B.* i. p. 259. no. 3779 (1869).

In the *adult male* the crown and nape are rusty brown, each feather with an obscure dark transverse terminal band, shading into russet-brown on the rest of the upper parts, suffused with rusty brown on the upper tail-coverts; lores and ear-coverts greyish brown; inner webs of quills brown; inner webs of tail-feathers dark russet-brown. Underparts, including the axillaries and under wing-coverts, palish slate-grey, palest on the chin and throat, shading into nearly white on the centre of the belly and under tail-coverts, and suffused with brown on the breast and flanks; on the throat and upper breast are obscure traces of spots; inner margin of quills palish brown. Bill nearly black above, pale below. Wings with the fourth and fifth primaries nearly equal and longest, second primary equal to the ninth or tenth, bastard primary 1·1 to 0·8 inch, not quite half the length of the second. Legs, feet, and claws brown. Length

of wing 3·55 to 3·15 inches, tail 2·8 to 2·6, culmen 0·71 to 0·65, tarsus 1·4 to 1·26.

The *female* scarcely differs from the male. *Birds of the year* and *young in first plumage* appear to be unknown.

The Greater Costa-Rican Thrush-Robin has only been obtained from some of the highland forests of Costa Rica, where it is said to be a resident.

a. Ad. sk. Costa Rica. H. Seebohm, Esq. [P.].

10. Catharus alticola.

Catharus frantzii, *Cab. apud Salvin, Ibis*, 1866, p. 190.
Catharus alticola, *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 3 (1879).

This form differs from the preceding in having the head a paler rusty brown, and the rest of the upper parts inclining to olive-brown instead of russet-brown, the difference being most strongly marked on the upper tail-coverts. The colours of the soft parts and the wing-formula are the same. Length of wing 3·45 to 3·15 inches, tail 3·0 to 2·6, culmen 0·7 to 0·64, tarsus 1·35 to 1·3.

The sexes are said to be alike. *Birds of the year* and *young in first plumage* are unknown.

The Guatemalan Thrush-Robin is confined, so far as is known, to the highland forest of Volcan de Fuego in Guatemala, at an altitude of 6000 to 10,000 feet, where it is a resident.

The British Museum does not possess an example of this species; but skins are in the collections of Dr. Sclater and Messrs. Salvin and Godman.

11. Catharus occidentalis.

Catharus occidentalis, *Sclater, P. Z. S.* 1859, pp. 323, 370; *Baird, Rev. Am. B.* p. 8 (1864); *Sumichrast, Mem. Bost. Soc. N. H.* i. p. 542 (1869); *Lawr. Bull. U. S. Nat. Mus.* no. 4, p. 11 (1870); *Sclat. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 4 (1879).
Turdus occidentalis (*Sclater*), *Gray, Hand-l. B.* i. p. 259. no. 3776 (1869).

This species differs from the two preceding subspecific forms, to which it is very closely allied, in the following particulars:—In the colour of the head it is scarcely distinguishable from *C. alticola*; the rest of the upper parts have, however, no trace of olive-brown, as in that species, but, on the contrary, are as rusty brown as the head and very slightly paler, in fact paler and more rusty than in *C. frantzii*; the general colour of the under-parts is a slightly paler slate-grey than in either of the subspecific forms above mentioned, and the throat and cheeks are suffused with brown, as well as the breast and flanks; the obscure traces of spots on the lower throat and upper breast are also slightly more developed and extend also to the cheeks. Bill dark brown,

paler at the base of the under mandible. Length of wing 3·5 to 3·3 inches, tail 3·1 to 3·0, culmen 0·64, tarsus 1·3 to 1·25, bastard primary 0·9 to 0·8.

Nothing is known of any difference which may be attributable to *age*, *sex*, or *season*.

The Mexican Thrush-Robin has only been obtained from the highlands of Southern Mexico, where it appears to be a resident.

a. ♂ ad. sk. Mexico. M. Verreaux.

12. Catharus gracilirostris.

Catharus gracilirostris, *Salvin, P. Z. S.* 1864, p. 580; *Lawr. Ann. Lyc. N. Y.* ix. p. 90 (1868); *Sclat. & Salv. Nomencl. Av. Neotr.* p. 1 (1873); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 6 (1879).

Turdus gracilirostris (*Salv.*), *Gray, Hand-l. B.* i. p. 259. no. 3780 (1869).

Head, nape, and ear-coverts slate-grey; the rest of the upper parts russet-brown; inner web of quills and tail-feathers brown; the underparts, including the axillaries and under wing-coverts, slate-grey, suffused with russet-brown on the breast and under tail-coverts; inner margin of quills brown. Bill black, slender, resembling that of the genus *Erithacus*. Wing with the fourth, fifth, and sixth primaries nearly equal and longest, second primary equal to the tenth or eleventh, bastard primary 0·9 to 0·85 inch, about half the length of the second. Legs, feet, and claws brown. Length of wing 3·0 to 2·7 inches, tail 2·5 to 2·2, culmen 0·6 to 0·55, tarsus 1·3 to 1·22.

The *female* is not known to differ from the male. *Birds of the year* have the head and flanks suffused with brown, the centre of the belly greyish white, and the chin, upper throat, axillaries, and under wing-coverts alone slate-grey. This may possibly be also the plumage of *the female*. *Young in first plumage* have pale centres to most of the feathers of the underparts, and probably also to the small feathers of the upper parts.

The Lesser Costa-Rican Thrush-Robin breeds in the mountain-forests of the province whose name it bears, and is not supposed to be migratory.

The British Museum does not possess an example of this aberrant species; but skins are in the collections of Dr. Sclater and Messrs. Salvin and Godman.

6. ERITHACUS.

	Type.
Erythacus, *Cuv. Leç. An. Comp.* tab. ii. (1801)	E. rubecula.
Aedon, *Forst. Syn. Cat. Br. B.* p. 53 (1814).....	E. luscinia.
Dandalus, *Boie, Isis*, 1826, p. 972	E. rubecula.
Cyanecula, *C. L. Brehm, Isis*, 1828, p. 1280.....	E. cærulecula.
Luscinia, *C. L. Brehm, Isis*, 1828, p. 1280	E. philomela.
Daulias, *Boie, Isis*, 1831, p. 542	E. luscinia.
Rubecula, *C. L. Brehm, Vög. Deutschl.* p. 360 (1831)	E. rubecula.

	Type.
Rhondella, *Rennie, White's Hist. of Selborne*, p. 437 (1833)	E. rubecula.
Philomela, *Selby, Brit. Orn.* i. p. 206 (1833)	E. luscinia.
Pandicilla, *Blyth in Rennie's Field Nat.* i. p. 291 (1833)	E. cærulecula.
Larvivora, *Hodgs. J. A. S. Beng.* vi. p. 102 (1837)	E. brunnea.
Calliope, *Gould, B. Eur.* pl. 118 (1837)	E. calliope.
Lusciola, *Keys. u. Blas. Wirb. Eur.* i. pp. 106, 189 (1840)	E. philomela.
Lusciola, *subgenus* Melodes, *Keys. u. Blas. Wirb. Eur.* i. p. 190 (1840)	E. calliope.
Melodes, *Newt. List B. Eur. Blasius*, p. 10 (1862, *ex Keys. & Blas.*)	E. calliope.
Irania, *De Filippi, Viagg. Pers.* p. 347 (1865)	E. gutturalis.

The genus *Erithacus* comprises a group of sixteen species, of which the Ruby-throated Robin may be considered a typical form, and which are very nearly allied to the Redstarts. The bill is slender, and generally black on the upper mandible and paler on the under; the rictal bristles are small, in most cases nearly obsolete. The legs vary in colour from dark to pale brown. The tarsus is unscutellated, except occasionally in very young birds. So far as is known, the young in first plumage are spotted, but moult into nearly adult plumage the first autumn. It is not known that any of the species have a spring moult. The tail consists of twelve feathers, and is generally more or less rounded. The throat is frequently ornamented with rich colours, in some species having a metallic gloss; and the cheeks generally differ in colour from the throat. In habits these birds closely resemble the Redstarts, though many of them are more aquatic in their habits.

Many of the species have very limited geographical ranges. Eight breed in the Western Palæarctic Region, of which two are confined to Europe west of Russia, one ranges from Europe to Persia, three from East Europe to Turkestan, whilst one is found throughout Arctic Europe and Asia. Three species breed in the Himalayas, of which one extends north-west to Turkestan, and one north-east to North-west China. One species is confined to Central India. Two species breed in Siberia, of which one is confined to the east and the other is found across the country. Two species are confined to Japan and China, and one to the Corea.

Key to the Species.

a. Tail russet-brown or chestnut.
  a'. Chin and throat pale brown.
    a''. Second primary longer than the sixth.
      a'''. First primary shorter than the primary-coverts. Upper tail-coverts olive-brown. Second primary about equal to the fourth. Tail 2·8 to 2·5 inches .. *philomela*, p. 295.
      b'''. First primary equal to the primary-coverts. Upper tail-coverts brown, with a slight shade of russet. Second primary about equal to the fifth. Tail 3·3 to 2·95 inches ..... *golzii*, p. 297.

c'''. First primary 0·1 to 0·2 inch longer than the primary-coverts. Upper tail-coverts chestnut-brown. Second primary about equal to the fifth. Tail 2·7 to 2·5 inches *luscinia*, p. 294.
b''. Second primary shorter than the sixth .... *sibilans*, p. 297.
b'. Chin and throat black ..... *komadori*, p. 298.
c'. Chin and throat chestnut.
c''. Upper parts russet-brown ..... *akahige*, p. 299.
d''. Upper parts olive-brown.
d'''. Upper tail-coverts chestnut ..... *hyrcanus*, p. 301.
e'''. Upper tail-coverts olive-brown ..... *rubecula*, p. 299.
b. Tail suffused with dull dark blue.
d'. Underparts chestnut ..... *brunneus*, p. 302.
e'. Underparts white ..... *cyaneus*, p. 303.
c. Tail uniform black ..... *gutturalis*, p. 304.
d. Tail uniform olive-brown ..... *calliope*, p. 305.
e. Tail dark brown, with more or less white on the base and tips of most feathers.
f'. Cheeks black ..... *pectoralis*, p. 306.
g'. Cheeks white ..... *tschebaiewi*, p. 308.
f. Tail brown, with basal two thirds of all but two centre feathers chestnut.
h'. Throat blue, with generally a white spot in the centre ..... *cyanecula*, p. 311.
i'. Throat blue, with a chestnut spot in the centre *cærulecula*, p. 308.

1. Erithacus luscinia.

Le Rossignol, *Briss. Orn.* ii. p. 397 (1760); *Montb. Hist. Nat. Ois.* v. p. 81 (1778); *Daubent. Pl. Enl.* no. 615. fig. 2 (1788).
Motacilla luscinia, *Linn. Syst. Nat.* i. p. 328 (1766); *Tunstall, Orn. Brit.* p. 2 (1771); *Gmel. Syst. Nat.* i. p. 950 (1788); *Bechst. Nat. urg. Deutschl.* iv. p. 509 (1795).
Sylvia luscinia (*Linn.*), *Scop. Ann.* i. p. 154 (1769); *Lath. Gen. Syn. Suppl.* i. p. 287 (1787); *Lath. Ind. Orn.* ii. p. 506 (1790); *Bechst. Orn. Taschenb.* i. p. 106 (1802); *Wolf, Taschenb.* i. p. 221 (1810); *Temm. Man. d'Orn.* p. 105 (1815); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 243 (1817); *Temm. Man. d'Orn.* i. p. 195 (1820); *Werner, Atlas, Insectiv.* pl. xxxiv. (1842).
Nightingale, *Lath. Gen. Syn.* ii. p. 408 (1783).
Aedon luscinia (*Linn.*), *Forst. Syn. Cat. Br. B.* p. 53 (1814).
Curruca luscinia (*Linn.*), *Koch, Syst. baier. Zool.* i. p. 154 (1816); *Rüpp. Syst. Uebers.* p. 57 (1845).
Luscinia philomela (*Bechst.*), *apud Brehm, Isis*, 1828, p. 1280, *apud Bp. Comp. List B. Eur. & N. Amer.* p. 15 (1838), *apud Gray, Gen. B.* i. p. 173 (1848), *apud Cab. Mus. Hein.* i. p. 1 (1850), *apud Gould, B. Gt. Br.* ii. pl. lvi. (*circa* 1868), *apud Heugl. Orn. N.O.-Afr.* i. p. 337 (1869), *apud Harting, Handb. Br. B.* p. 15 (1872).
Daulias luscinia (*Linn.*), *Boie, Isis*, 1831, p. 542; *Newt. ed. Yarr. Br. B.* i. p. 312 (1872); *Dresser, B. Eur.* pt. l. (1876).
Luscinia megarhynchos,
Luscinia media,
Luscinia okenii,
Luscinia peregrina,
Brehm, Vög. Deutschl. pp. 356, 357, 358 (1831).
Philomela luscinia (*Linn.*), *Selby, Brit. Orn.* i. p. 206 (1833); *Gould, B. Eur.* ii. pl. 116 (1837); *Bp. Consp.* i. p. 295 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 236 (1859); *Degl. et Gerbe, Orn.*

Eur. i. p. 431 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 227 (1867); *Doderl. Avif. Sicil.* p. 117 (1869); *Salvad. Faun. Ital. Ucc.* p. 96 (1871); *Shelley, B. Egypt*, p. 88 (1872); *Irby, B. Gibr.* p. 80 (1875).

Lusciola luscinia (*Linn.*), *Keys. u. Blas. Wirb. Eur.* pp. lviii, 189 (1840); *Heugl. Syst. Uebers.* p. 25 (1856); *Linderm. Vög. Griechenl.* p. 103 (1860); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Droste, Vogelw. Borkum*, p. 95 (1869); *Fritsch, Vög. Eur.* p. 181 (1870).

Erithacus luscinia (*Linn.*), *Degl. Orn. Eur.* i. p. 499 (1849).

Luscinia vera, *Gray, Hand-l. B.* i. p. 220. no. 3151 (1869).

General colour of the upper parts, including the ear-coverts, russet-brown, shading into brownish chestnut on the upper tail-coverts and tail. General colour of the underparts, including the lores, buffish white, shading into greyish white on the breast and flanks, and into brownish white on the axillaries and under wing- and tail-coverts. Bill with the upper mandible brown and the under mandible pale horn-colour; rictal bristles nearly obsolete. Wing with the third and fourth primaries nearly equal and longest, second primary about equal to the fifth, bastard primary 0·7 to 0·6 inch. Outside tail-feathers 0·2 inch shorter than the longest. Legs, feet, and claws brown. Length of wing 3·4 to 3·0 inches, tail 2·75 to 2·5, culmen 0·62 to 0·55, tarsus 1·1 to 1·01.

The *female* does not differ from the male, nor does *autumn plumage* vary much from that of spring. *Birds of the year* scarcely differ from adults. *Young in first plumage* have pale centres to most of the feathers.

The Western Nightingale breeds in Central and Southern Europe, extending its range into the south of England, but rarely if ever found in Scandinavia or Russia. It passes through North Africa on migration, probably wintering somewhere in the interior south of Abyssinia.

a. Ad. st.	England.	J. Gould, Esq. [P.].
b. Ad. st.	Bayswater, London.	J. F. Stevens, Esq. [P.].
c, d. Ad. sk.	Middlesex.	F. Godman and O. Salvin Esqrs. [P.].
e, f, g, h. Juv. st.	Cambridgeshire.	Mr. J. Baker [C.].
i, k. ♂ ♀ ad.; *l, m.* Juv. st.	Leicestershire.	Theodore Walker, Esq. [P.].
n. Ad. sk.	Valkenswaard, Holland, 1863 (*Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
o. Ad. sk.	Belgium.	Brussels Museum.
p. ♀ ad. sk.	Valencia, Spain, April 19, 1872.	Howard Saunders, Esq. [P.].
q. Ad. sk.	Tunis.	L. Fraser, Esq. [P.].
[illegible]ull.	Würtemberg.	Dr. A. Günther.

2. Erithacus philomela.

Rossignol, *Briss. Orn.* iii. p. 400 (1760); *Montb. Hist.* v. p. 113 (1778).

[illegible]tingale, *Lath. Gen. Syn.* ii. p. 411 (1783).

[illegible]cinia, *Linn.*, β. major, *Gmel. Syst. Nat.* i. p. 950 (1788).

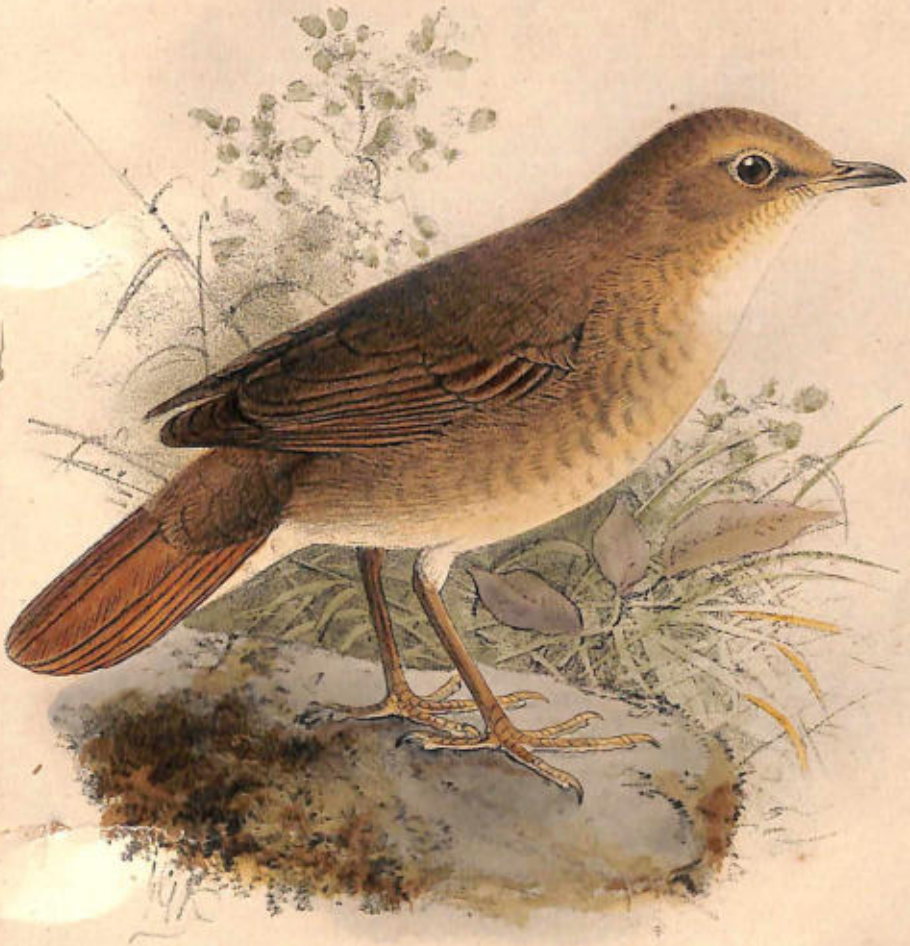
J. G. Keulemans del

Sylvia luscinia (*Linn.*), A. major (*Gmel.*), *Lath. Ind. Orn.* ii. p. 506 (1790).
Motacilla philomela, *Bechst. Naturg. Deutschl.* iv. p. 536 (1795).
Sylvia philomela (*Bechst.*), *Bechst. Orn. Taschenb.* i. p. 167 (1802); *Wolf, Taschenb.* i. p. 222 (1810); *Temm. Man. d'Orn.* p. 106 (1815); *Meyer, Vög. Liv- u. Esthl.* i. p. 2 (1815); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 254 (1817); *Temm. Man. d'Orn.* i. p. 196 (1820); *Ménétr. Cat. Rais. Cauc.* p. 33 (1832); *Nordm. Démid. Voy. Russ. mérid.* iii. p. 137 (1840); *Werner, Atlas, Insectiv.* pl. xxxv. (1842).
Motacilla aëdon, *Pallas, Zoogr. Rosso-Asiat.* i. p. 486 (1811).
Curruca philomela (*Bechst.*), *Koch, Syst. baier. Zool.* i. p. 154 (1816).
Luscinia major, *Brehm, Vög. Deutschl.* p. 355 (1831); *Gray, Gen. B.* i. p. 173 (1848); *Cab. Mus. Hein.* i. p. 1 (1850); *Heugl. Orn. N.O.-Afr.* i. p. 337 (1869).
Luscinia philomela (*Bechst.*), *Brehm, Vög. Deutschl.* p. 356 (1831); *Sundev. Sv. Fogl.* p. 57 (1856); *Gray, Hand-l. B.* i. p. 220. no. 3152 (1869).
Philomela magna, *Blyth, Rennie's Field Nat.* i. p. 307 (1833).
Philomela turdoides, *Blyth, fide Gould, B. Eur.* ii. pl. 117 (1837).
Lusciola philomela (*Bechst.*), *Keys. u. Blas. Wirb. Eur.* pp. lviii, 189 (1840); *Heugl. Syst. Uebers.* p. 25 (1856); *Linderm. Vög. Griechenl.* p. 103 (1860); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Fritsch, Vög. Eur.* p. 181 (1870); *Bogd. B. Cauc.* p. 100 (1879).
Erithacus philomela (*Bechst.*), *Degl. Orn. Eur.* i. p. 501 (1849); *Dubois, Ois. Eur.* pl. 62 (1862).
Philomela major (*Brehm*), *Bp. Consp.* i. p. 295 (1850); *Degl. et Gerbe, Orn. Eur.* i. p. 432 (1867); *Doderl. Avif. Sicil.* p. 118 (1869); *Shelley, B. Egypt*, p. 88 (1872).
Luscinia eximia, *Brehm, Vogelf.* p. 144 (1855).
Luscinia hybrida, *Brehm, Vogelf.* p. 145 (1855).
Philomela aëdon (*Pall.*), *Salvad. Faun. Ital. Ucc.* p. 97 (1871).
Luscinia occidentalis, Luscinia aëdon (*Pall.*), Luscinia infuscata, *Severtz. Turkest. Jevotn.* p. 120 (1873).
Lusciola aëdon (*Pall.*), *Dresser, Ibis*, 1875, p. 341.
Lusciola aëdon (*Pall.*), β. infuscata (*Severtz.*), *Dresser, Ibis*, 1875, p. 341.
Daulias philomela (*Bechst.*), *Dresser, B. Eur.* pt. xlix. (1876).

This species differs from the preceding in being generally less russet in colour (more olive), especially on the upper tail-coverts, in having a smaller bastard primary, a more pointed wing, and in being a somewhat larger bird. Bill with the upper mandible brown and the under mandible pale horn-colour; rictal bristles nearly obsolete. Wing with the third primary longest, second primary equal to or slightly longer than the fourth, bastard primary 0·5 to 0·4 inch; outside tail-feathers 0·25 to 0·2 inch shorter than the longest. Legs, feet, and claws brown. Length of wing 3·5 to 3·4 inches, tail 2·7 to 2·55, culmen 0·63 to 0·6, tarsus 1·1 to 1·05.

In the variations of its plumage, in consequence of *season*, this species resembles the preceding. , 357, 358

The Eastern Nightingale breeds in Eastern Europe ing into the valley of the Rhine, extending northw Sweden and Central Russia, and eastwards int (1833); *Gould,* 1850); *Jaub. et et Gerbe, Orn.*



J.G.Keulemans del. Mintern Bros. imp.

Erythacus sibilans.

Northern Turkestan, and South-western Siberia. It passes through North-eastern Africa on migration, and doubtless winters somewhere in the interior.

Eu			
whi	Juv. sk.	Europe.	Purchased.
	♂ ad. sk.	South Sweden, July 4, 1873.	J. Meves, Esq. [C.].
	uv. sk.	South Sweden, June 29, 1872.	J. Meves, Esq. [C.].
d.	♀ ad. sk.	Skâne, July 6, 1874 (*J. Meves*).	R. B. Sharpe, Esq. [P.].
e.	Ad. sk.	Persia.	Purchased.

3. Erithacus golzii.

Sylvia luscinia (*Linn.*), *apud Ménétr. Cat. Rais. Cauc.* p. 33 (1832), *apud Nordm. Démid. Voy. Russ. mérid.* iii. p. 137 (1840).
Lusciola luscinia (*Linn.*), *apud Filippi, Viagg. Pers.* p. 347 (1865).
Lusciola golzii, *Cab. Journ. Orn.* 1873, p. 79.
Luscinia hafizi, *Severtz. Turkest. Jevotn.* p. 120 (1873); *Blanf. Ibis*, 1874, p. 80.
Luscinia philomela (*Bechst.*), *apud Severtz. Turkest. Jevotn.* p. 120 (1873).
Lusciola luscinia (*Linn.*), β. hafizi (*Severtz.*), *Dresser, Ibis*, 1875, p. 341.
Lusciola luscinia (*Linn.*), γ. philomela (*Bechst.*), *apud Dresser, Ibis*, 1875, p. 341.
Daulias hafizi (*Severtz.*), *Blanf. East. Pers.* ii. p. 169 (1876).

In coloration this species is intermediate between the two preceding species, being slightly more olive than *E. luscinia* and slightly more russet than *E. philomela*. In its wing-formula it resembles the former species, but may easily be distinguished from either by its slightly longer bill and much longer tail. Bill dark brown above, pale horn-colour below; rictal bristles nearly obsolete. Wing with the third and fourth primaries nearly equal and longest, second primary about equal to the fifth, bastard primary 0·65 to 0·55 inch; outside tail-feathers 0·3 inch shorter than the longest. Legs, feet, and claws brown. Length of wing 3·8 to 3·3 inches, tail 3·32 to 2·95, culmen 0·7 to 0·66, tarsus 1·1 to 1·0.

The *sexes* are alike. *Birds of the year* and *young in first plumage* are unknown.

The Persian Nightingale breeds in the cultivated districts of Turkestan and Western Persia, extending its range into the Caucasus. Its winter quarters are unknown.

a.	Ad. sk.	Persia.	Charles Darwin, Esq. [P.].
b.	♂ ♀ ad. sk.	Shiraz, Persia.	Col. St. John [C.].

4. Erithacus sibilans. (Plate XVII.)

Larvivora sibilans, *Swinhoe, P. Z. S.* 1863, p. 292; *id. P. Z. S.* 1871, p. 358; *David et Oust. Ois. Chine*, p. 239 (1877).
Ruticilla sibilans (*Swinh.*), *Gray, Hand-l. B.* i. p. 222. no. 3178 (1869).
? Lusciola akahige, *Temm. apud Hume, Ibis*, 1871, p. 31.
? Rubicula akahige (*Temm.*), *apud Hume, Ibis*, 1871, p. 31.

General colour of the upper parts russet-brown, shading into chestnut-brown on the upper tail-coverts; wings brown, the outside webs of the quills and coverts margined with russet-brown; ta' chestnut-brown. Underparts pale brown, the feathers of the bres and flanks with darker margins; lores brown; the feathers of t cheeks and ear-coverts with obscure dark margins, which beco nearly obsolete on the throat. Bill dark brown, paler at the base of the under mandible. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 0·6 inch. Legs, feet, and claws light brown. Length of wing 2·56 inches, tail 1·85, tarsus 0·94, culmen 0·53, outside tail-feathers 0·15 shorter than the longest.

The *female* of this species and the *young* appear to be entirely unknown. It is possible that the examples described above may be females, of which the male is undiscovered.

Swinhoe's Robin is only known from the type specimen (in my collection) from near Canton, and the example in the British Museum, the precise locality of which is unknown. I have not seen Hume's skin from Kumaon, but it also will doubtless prove to be this species.

a. Ad. sk. China. J. R. Reeves, Esq. [P.].

5. Erithacus komadori.

Sylvia komadori, *Temm. Pl. Col.* no. 570 (1824).
Lusciola komadori (*Temm.*), *Temm. et Schlegel, Faun. Japon., Aves*, p. 55, pl. xxi. C (1847).
Erythacus komadori (*Temm.*), *Gray, Gen. B.* i. p. 182 (1848); *id. Hand-l. B.* i. p. 223. no. 3195 (1869); *Blakiston & Pryer, Ibis*, 1878, p. 239.
Rubecula komadori (*Temm.*), *Bp. Consp.* i. p. 295 (1850).

In the *adult male in breeding-plumage* the general colour of the upper parts is orange-chestnut, the inside web of the quills being russet-brown; forehead, lores, chin, throat, cheeks, breast, and flanks black; the feathers of the lower breast and upper flanks margined with white; rest of the underparts white; under wing-coverts black, margined with white; axillaries white, with dark centres; inner margin of quills chestnut-brown. Bill brown. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 0·8 inch (female 0·7). Length of wing, male 2·9, female 2·65 inches; tail, male 1·9, female 1·8; culmen, male 0·68, female 0·66; tarsus 1·02; outside tail-feathers 0·2 inch shorter than the longest.

The *female* differs from the male in being slightly less brilliant in colour, and in having all the feathers which are black in the male creamy white margined with slate-grey, which is the colour of the rest of the underparts, except the centre of the belly and under tail-coverts, which are white; forehead russet-brown. *Birds of the year* and *young in first plumage* are unknown.

The Corean Robin is supposed to be peculiar to the peninsula whose name it bears.

It is not known that any examples of this fine species exist in European collections, except the types in the Leyden Museum, from which the above descriptions are taken.

6. Erithacus akahige.

Sylvia akahige, *Temm. Pl. Col.* no. 571 (1824).
Erythacus akahige (*Temm.*), *Gray, Gen. B.* i. p. 182 (1846); *id. Hand-l. B.* i. p. 223. no. 3194 (1869); *Swinhoe, P. Z. S.* 1871, p. 359; *David et Oust. Ois. Chine*, p. 230 (1877); *Blakiston & Pryer, Ibis*, 1878, p. 239.
Lusciola akahige (*Temm.*), *Temm. et Schl. Faun. Japon., Aves*, p. 55, pl. xxi. B (1847).
Rubecula akahige (*Temm.*), *Bp. Consp.* i. p. 295 (1850).

In the *adult male* the general colour of the upper parts is russet-brown, shading into olive-brown on the rump; forehead, lores, ear-coverts, chin, throat, upper breast, upper tail-coverts, and tail orange-chestnut; quills and wing-coverts brown, margined on the outer webs with russet-brown; lower breast slate-grey, very dark where it joins the chestnut of the upper breast, shading into russet-brown on the flanks and into white on the centre of the belly and under tail-coverts; axillaries and under tail-coverts russet-brown; inner margin of quills pale brown. Bill with the upper mandible brown and the under mandible pale brown. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the eighth, bastard primary 0·7 to 0·65 inch. Legs, feet, and claws brown. Length of wing 3·0 to 2·9 inches, tail 2·1 to 2·0, culmen 0·61 to 0·6, tarsus 1·17 to 1·1.

The *female* differs from the male in having the chestnut paler and duller, and the slate-grey replaced by brown. *Birds of the year* and *young in first plumage* are unknown.

The Japanese Robin breeds on the high mountains of Japan, and is supposed to be a resident on the islands. It has also been recorded from North-east China.

a. Ad. st.	Japan.	Leyden Museum.
b. Ad. sk.	Japan.	E. Wilson, Esq.

7. Erithacus rubecula.

La Rouge-gorge, *Briss. Orn.* iii. p. 418 (1760); *Buff. Hist. Nat. Ois.* v. p. 196, pl. xi. (1778).
Motacilla rubecula, *Linn. Syst. Nat.* i. p. 337 (1766); *Tunst. Orn. Brit.*, p. 2 (1771); *Gmel. Syst. Nat.* i. p. 993 (1788); *Bechst. Naturg. Deutschl.* iv. p. 586 (1795).
Sylvia rubecula (*Linn.*), *Scop. Ann.* i. p. 156 (1769); *Lath. Gen. Syn. Suppl.* i. p. 287 (1787); *id. Ind. Orn.* ii. p. 520 (1790); *Bechst. Orn. Taschenb.* i. p. 177 (1802); *Wolf, Taschenb.* i. p. 238 (1810); *Temm. Man. d'Orn.* p. 115 (1815); *Koch, Syst. baier. Zool.* i. p. 152 (1816); *Temm. Man. d'Orn.* i. p. 215 (1820); *Ménétr. Cat. Rais. Cauc.* p. 35 (1832); *Nordm. Démid. Voy. Russ. mérid.* iii. p. 138 (1840); *Werner, Atlas, Insectiv.* pl. 49 (1842).

La Gorge-rouge, *Daubent. Pl. Enl.* no. 361. fig. 1 (1778).
Redbreast, *Lath. Gen. Syn.* ii. p. 442 (1783).
Erythacus, *Cuvier, Leçons Anat. Comp.* tab. ii. (1801).
Curruca rubecola (*Linn.*), *Leach, Syst. Cat. Mamm. &c. Brit. Mus.* p. 25 (1816).
Curruca rubecula, *Forst. Syn. Cat. Brit. B.* p. 54 (1817).
Ficedula rubecula (*Linn.*), *Boie, Isis*, 1822, p. 553.
Dandalus rubecula (*Linn.*), *Boie, Isis*, 1826, p. 972.
Dandalus pinetorum,
Dandalus foliorum,
Dandalus septentrionalis, } *Brehm, Isis*, 1828, p. 1280.
Rubecula pinetorum (*Brehm*),
Rubecula foliorum (*Brehm*),
Rubecula septentrionalis (*Brehm*), } *Brehm, Vög. Deutschl.* pp. 360, 361 (1831).
Erythacus rubecula (*Linn.*), *Swains.** *Faun. Bor.-Amer., Birds*, p. 488 (1831); *Gould**, *B. Eur.* ii. p. 98 (1837); *Rüpp. Syst. Uebers.* p. 57 (1845); *Gray, Gen. B.* i. p. 182 (1846); *Degl. Orn. Eur.* i. p. 509 (1849); *Cab. Mus. Hein.* i. p. 1 (1850); *Heugl. Syst. Uebers.* p. 25 (1856); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Gray, Hand-l. B.* i. p. 223. no. 3193 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 335 (1869); *Doderl. Avif. Sicil.* p. 118 (1869); *Droste, Vogelw. Borkum*, p. 95 (1869); *Godman, Azores*, p. 23 (1870); *Salvad. Faun. Ital. Ucc.* p. 94 (1871); *Newt.*† *ed. Yarr. Br. B.* i. p. 305 (1872); *Gould, B. Gt. Brit.* ii. pl. 48 (1872); *Shelley*†, *B. Egypt*, p. 87 (1872); *Harting**, *Handb. Br. B.* p. 12 (1872); *Dresser*†, *B. Eur.* pt. xxiv. (1873); *Irby, B. Gibr.* p. 83 (1875); *Dresser*†, *Ibis*, 1875, p. 342; *Blanf. East. Pers.* ii. p. 159 (1876).
Rubecula familiaris, *Blyth, Field Naturalist*, i. p. 424 (1833); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 233 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 429 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 224 (1867).
Rhondella rubecula (*Linn.*), *Rennie, White's Selborne*, p. 437 (1833).
Lusciola rubecula (*Linn.*), *Keys. u. Blas. Wirb. Eur.* pp. lviii, 191 (1840); *Schl. Rev. Crit.* p. xxxii (1844); *Linderm. Vög. Griechenl.* p. 104 (1860); *Fritsch, Vög. Eur.* p. 183 (1870); *Severtz. Turkest. Jevotn.* p. 65 (1873).
Rubecula rubecula (*Linn.*), *Bp. Consp.* i. p. 295 (1850).
Luscinia rubecula (*Linn.*), *Sundev. Sv. Fogl.* p. 56 (1856).

Forehead, lores, ear-coverts, chin, throat, and breast bright orange-chestnut; general colour of the rest of the plumage olive-brown, with a few grey feathers on the crown next the forehead and on the sides of the neck, and shading into nearly white on the centre of the belly; axillaries brownish white, with concealed dusky bases; under wing-coverts mixed orange-chestnut and pale chestnut; under tail-coverts white, more or less tinged with brown; greater wing-coverts with indistinct pale chestnut tips. Bill dark brown, paler at the base of the under mandible. Wing with the fourth and fifth primaries nearly equal and longest, second primary equal to the eighth or ninth, bastard primary 0·92 to 0·8 inch. Legs, feet, and claws brown. Length of wing 2·9 to 2·6 inches, tail 2·5 to 2·2, culmen 0·55 to 0·5, tarsus 1·1 to 0·98.

There does not appear to be any difference in the plumage of *the sexes*. *After the autumn moult* the colour of the breast is richer,

* Spelt *Erythaca*. † Spelt *Erithacus*.

and the pale chestnut tips to the greater wing-coverts are darker and more distinct. *Birds of the year* scarcely differ from adults. *Young in first plumage* have pale ochraceous centres and nearly black tips to most of the small feathers of both the upper and under parts.

The Robin Redbreast breeds in most parts of Europe as far north as the Arctic Circle, and in many parts of Western North Africa. Where the winters are severe it migrates southwards in autumn to South Europe, North Africa, Palestine, and the cultivated districts of North-west Turkestan. It is said to be a resident, though rare, in South Persia.

a, *b*. Ad. st.	Great Britain.	
c. Ad. st.	Devonshire.	Col. Montagu [P.].
d. ♀ ad. sk.	Surrey, June 1857 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
e. Juv. sk.	Hampstead (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
f. ♀ ad. sk.	Cambridgeshire (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
g. Ad., *h–l*. Juv. st.	Cambridgeshire (*J. Baker*).	Mr. J. Baker [C.].
m. Ad., *n*. Juv. sk.	Belgium.	Brussels Museum [P.].
o. ♂ ad. sk.	Seville, Nov. 1869.	H. Saunders, Esq. [P.].
p. Ad. sk.	Algeria.	F. Godman and O. Salvin, Esqrs. [P.].
q. ♂ ad. sk.	Sousa, Tunis, Feb. 27, 1857 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
r. ♂ ad. sk.	Nahr El Kelb, Palestine.	Canon Tristram [C.].
s, *t*. ♂ ♀ ad. sk.	Teneriffe, April and May, 1871 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
u, *v*. ♂ ad. sk.	Madeira, June 20, 1871 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
w. Ad. sk.	Fayal, Azores, March 1865 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
x. ♂ ad. sk.	S. Michael's, Azores, April 1865 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
y. Ad. sk.	S. Michael's, Azores, March 1865 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
z, *a'*. Skeleton.	England.	Purchased.

8. Erithacus hyrcanus.

Sylvia rubecula (*Linn.*), *apud Ménétr. Cat. Rais. Cauc.* p. 35 (1832).
Erythacus rubecula (*Linn.*), *apud Filippi, Viagg. Pers.* p. 347 (1865).
Erythacus hyrcanus, *Blanf. Ibis*, 1874, p. 79*; *Blanf. East. Pers.* ii. p. 160, pl. xv. fig. 1 (1876); *Bogd. B. Cauc.* p. 98 (1879).

This species is very nearly allied to *E. rubecula*, but differs from it in having the olive-brown of the upper tail-coverts replaced by chestnut. In all other respects, size, wing-formula, &c., the only difference I can detect is that the bill is slightly larger in the

* Spelt *Erithacus hyrcanus*.

Eastern species, the culmen measuring 0·65 inch. The rufous of the breast is said to be deeper in colour; but the types were all obtained *after the autumn moult*, when the Western species is similarly coloured.

The *female* is said not to differ from the male. *Birds in spring plumage* and *young in first plumage* are not known.

The Persian Robin abounds in the forest districts of the southern shores of the Caspian, extending its range westwards into the Caucasus. Nothing has been recorded respecting its migrations.

a. ♂ ad. sk. Resht, Persia. Col. St. John [C.].

9. Erithacus brunneus.

Larvivora cyana (*Pallas*), *apud Hodgson, J. A. S. Beng.* vi. p. 102 (1837, *male*), *apud Bp. Consp.* i. p. 301 (1850), *apud Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 310 (1854), *apud Jerdon, B. Ind.* ii. p. 145 (1863), *apud Holdsw. P. Z. S.* 1872, p. 454, *apud Hume, Nests and Eggs Ind. B.* ii. p. 324 (1874).
Larvivora brunnea, *Hodgson, J. A. S. Beng.* vi. p. 102 (1837, *female*); *Legge, Birds of Ceylon*, p. 446 (1879).
Phœnicura superciliaris, *Jerd. Madr. Journ.* xiii. p. 170 (1844).
Ruticilla cyana (*Pallas*), *apud Gray, Gen. B.* i. p. 180 (1846).
Calliope cyana (*Pallas*), *apud Blyth, Cat. B. Mus. As. Soc.* p. 169 (1849), *apud Layard, Ann. Nat. Hist.* 1853, xiii. p. 266, *apud Layard & Kelaart**, *Prodr. Cat. B. App.* p. 57 (1853).
Larvivora superciliaris (*Jerd.*), *Blyth, Ibis*, 1867, p. 16; *Brooks, Str. F.* 1875, p. 240; *Fairbank, Str. F.* 1876, p. 259.
Ruticilla cyanea (*Pallas*), *apud Gray, Hand-l. B.* i. p. 222. no. 3176 (1869).

Adult male in breeding-plumage. General colour of the upper parts dull dark blue; lores, forehead at the base of the bill, cheeks, and ear-coverts black, shading into dull dark blue on the sides of the neck; eye-stripe white, extending to the nape; wings brown, the outer webs of the wing-coverts and secondaries more or less suffused with dull dark blue; tail brown, the two centre feathers and the outer webs of the others more or less suffused with dull dark blue. Underparts orange-chestnut, shading into white on the centre of the belly and under tail-coverts; axillaries and under wing-coverts grey, more or less suffused with pale blue; inner margin of quills pale brown. Bill very dark brown, paler at the base of the under mandible; rictal bristles nearly obsolete. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the eighth, bastard primary 0·8 to 0·7 inch. Legs, feet, and claws flesh-coloured. Length of wing 3·0 to 2·7 inches, tail 1·95 to 1·7, culmen 0·6 to 0·55, tarsus 1·05 to 1·0.

In the *female* the general colour of the upper parts is olive-brown, slightly suffused with chestnut on the upper tail-coverts. The underparts, including the axillaries and under wing-coverts, are chestnut-brown, paler on the chin and throat, and shading into white on the centre of the belly and under tail-coverts. *Males of*

* Spelt *Calliope cyanea*.

the year resemble the female. *Young in first plumage* appear to be unknown.

The Indian Blue Robin breeds on the Himalayas from Cashmere to Sikkim, the Neilgherry hills, and probably other mountain-ranges in India. It winters in the plains of India and in Ceylon.

a. ♂ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
b. ♂ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
c, d. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
e. ♀ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Larvivora brunnea*, Hodgs.)
f. ♂ ad. sk.	Nepal (*Hodgson*).	India Museum.
g. ♂ ad. sk.	Darjiling.	W. Fotheringham, Esq. [P.].
h. ♂ ad. sk.	Madras.	Dr. Jerdon [P.].
i. ♂ ad. sk.	Neilgherries (*Dr. Jerdon*).	India Museum.
k, l. ♂ ♀ ad. sk.	Ceylon.	E. L. Layard, Esq. [C.].
m. ♂ ad. sk.	Newara Eliya.	Mr. E. Boate [C.].
n. ♀ ad. sk.	Near Kandy.	A. White, Esq. [C.].
o. ♂ ad. sk.	Travancore.	F.W. Bourdillon, Esq. [C.].

10. Erithacus cyaneus.

Motacilla cyane, *Pall. Reis. Russ. Reichs.* iii. p. 697 (1776).
Larvivora gracilis, *Swinhoe, Ibis*, 1861, p. 262.
Lusciola (Calliope) cyane (*Pall.*), *Radde, Reis. Sibir., Vög.* p. 250, pl. x. figs. 1–4 (1863).
Lusciola cyane (*Pall.*), *Swinhoe, Ibis*, 1866, p. 315.
Ruticilla gracilis (*Swinh.*), *Gray, Hand-l. B.* i. p. 222. no. 3177 (1869).
Larvivora cyane (*Pall.*), *Swinhoe, P. Z. S.* 1871, p. 358; *Blyth & Wald. B. Burm.* p. 101 (1875); *Tacz. Bull. Soc. Zool. France*, 1876, p. 142; *Prjev. Rowley's Orn. Misc.* ii. p. 178 (1877); *Hume & Davison, Stray Feath.* vi. p. 335 (1878).

Adult male in breeding-plumage. General colour of the upper parts dull dark blue, brighter on the forehead and crown; lores, forehead at the base of the bill, cheeks, and ear-coverts black, shading into dull dark blue on the sides of the neck; no trace of eye-stripe; wings, wing-coverts, and tail brown, the outer webs of the feathers suffused with dull dark blue. Underparts pure white; axillaries and under wing-coverts grey, more or less suffused with blue; inner margin of quills pale brown. Bill nearly black; rictal bristles nearly obsolete. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·7 to 0·6 inch. Legs, feet, and claws pale brown. Length of wing 3·0 to 2·75 inches, tail 2·0 to 1·7, culmen 0·61 to 0·55, tarsus 1·1 to 1·01.

In the *female* the general colour of the upper parts is dark olive-brown, suffused with blue on the upper tail-coverts; the underparts are pale chestnut-brown, shading into nearly white on the under tail-coverts. *Males of the year* have the outside webs of the quills

and wing-coverts brown, and more or less brown on the edges of the feathers of the breast and flanks. *Females of the year* have the upper tail-coverts brown, and dark edges to the feathers of the breast. *Young in first plumage* appear to be unknown; but a *young male in September*, which has probably not completed its first moult, has brown lores, cheeks, and ear-coverts like the female, showing pale centres to the feathers.

The Siberian Blue Robin breeds in Eastern Siberia, from Lake Baical to the mouth of the Amoor. It winters in North India, China, South-east Mongolia, and in Tenasserim, ranging through the Malayan peninsula to Borneo.

a. ♂ ad. sk.	Tientsin.	Mr. Henry Whitely.
b. ♂ juv. st.	India.	Purchased.
c. ♂ ad. sk.	Near Simla.	Capt. Stackhouse Pinwill [P.].
d. ♂ ad. sk.	Malacca.	India Museum.
e. ♀ ad. sk.	Labuan, Borneo.	Hugh Low, Esq. [C.].

11. Erithacus gutturalis.

Cossypha gutturalis, *Guérin, Rev. Zool.* 1843, p. 162; *Guér. et Lafresn. Ferr. et Gal. Voy. en Abyss.* iii. p. 201, pl. v. (1847); *Finsch, Tr. Z. S.* vii. p. 243 (1870); *Sharpe & Dresser, B. Eur.* pt. xiv. (1872); *Dresser, Ibis*, 1876, p. 78.

Bessonornis gutturalis (*Guér.*), *Gray, Gen. B.* i. p. 220 (1847); *Bp. Consp.* i. p. 301 (1850); *Gray, Hand-l. B.* i. p. 265. no. 3874 (1869).

Irania filoti, *Filippi, Arch. Zool. Modena*, ii. p. 381 (1863).

Saxicola albigularis, *Pelz. Sitz. Ak. Wiss. Wien*, xlviii. p. 150 (1863).

Irania finoti, *Filippi, Viagg. Pers.* p. 347 (1865).

Bessornis albigularis (*Pelz.*), *Tristram, Ibis*, 1867, p. 89, pl. i.

Bessornis gutturalis (*Guér.*), *Heugl. Orn. N.O.-Afr.* i. p. 378 (1869).

Irania albigula, *Severtz. Turkest. Jevotn.* pp. 65, 122 (1873).

Cossypha (Irania) gutturalis (*Guér.*), *Blanf. East. Pers.* ii. p. 161 (1876).

Adult male in breeding-plumage. General colour of the upper parts slate-grey; lores and ear-coverts black; eye-stripe white; quills brown, margined with slate-grey on the outside webs; wing-coverts slate-grey; innermost secondaries brown on inside web, and slate-grey on outside web; tail black; cheeks black. Chin and upper throat white, occasionally bounded by a gorget of black across the lower throat; remainder of underparts, including the axillaries and under wing-coverts, chestnut, shading into white on the centre of belly and under tail-coverts; inner margin of quills brown. Bill black. Wing with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·9 to 0·7 inch; outside tail-feathers 0·2 inch shorter than the longest. Legs, feet, and claws black. Length of wing 3·75 to 3·0 inches, tail 3·0 to 2·65, culmen 0·75 to 0·65, tarsus 1·02.

In the *female* the general colour of the upper parts, including the lores and ear-coverts, is brownish grey, shading into slate-grey on

the upper tail-coverts; wings brown; tail nearly black. Chin and throat nearly white; cheeks and breast brown, the feathers of the lower breast with nearly white margins, which gradually increase in length on the rest of the lower parts, entirely concealing the brown bases on the belly and under tail-coverts; axillaries, under wing-coverts, and flanks pale chestnut; lower throat and breast frequently suffused with chestnut. *Males of the year* have the chestnut of the underparts replaced by buff. *Young in first plumage* have pale centres and dark margins to most of the small feathers, and pale tips to most of the larger ones.

The White-throated Robin breeds in Asia Minor, Palestine, Northern and Western Persia, and Western Turkestan. It has also been found in spring and autumn in Abyssinia, but may probably go still further south to winter.

a. ♂ ad. sk.	Xanthus, Asia Minor.	Sir C. Fellowes [P.].
b. ♂ ad. sk.	Smyrna.	Consul Merlin [P.].
c, *d*. ♂ ♀ ad. sk. sl. ch.	Kaisarziah, Asia Minor, May 5, 1876 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
e. ♀ ad. sk.	Shiraz, Persia, Sept. 1870.	Col. St. John [C.].
f. ♂ ad. sk.	Karij valley, Elburz Mountains, Aug. 16, 1872.	W. T. Blanford, Esq. [C.].
g. ♂ ad. sk.	Tashkend, April 15, 1866 (*Severtzoff*).	R. B. Sharpe, Esq.

12. Erithacus calliope.

Motacilla calliope, *Pall. Reis. Russ. Reichs*, iii. p. 697 (1776).
Kamtschatka Thrush, *Lath. Gen. Syn.* ii. p. 28 (1783).
Turdus camtschatkensis, *Gmel. Syst. Nat.* i. p. 817 (1788, *ex Lath.*).
Turdus calliope (*Pall.*), *Lath. Ind. Orn.* i. p. 331 (1790).
Accentor calliope (*Pall.*), *Temm. Man. d'Orn.* iii. p. 172 (1835).
Calliope lathami, *Gould, B. Eur.* ii. pl. 118 (1837); *Blyth, J. A. S. Beng.* xi. p. 112 (1842).
Lusciola calliope (*Pall.*), *Keys. u. Blas. Wirb. Eur.* pp. lviii, 190 (1840); *Temm. et Schleg. Faun. Japon. Aves*, p. 57 (1847).
Calliope camtschatkensis (*Gmel.*), *Strickl. Ann. Nat. Hist.* vi. p. 422 (1841); *Blyth, J. A. S. Beng.* xvi. p. 134 (1847); *id. Cat. B. Mus. As. Soc.* p. 169 (1849); *Bp. Consp.* i. p. 295 (1850); *Cab. Mus. Hein.* i. p. 1 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 313 (1854); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 236 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 464 (1867); *Swinh. P. Z. S.* 1871, p. 359; *Dresser, B. Eur.* pt. xlvi. (1875); *Blyth & Wald. B. Burm.* p. 101 (1875); *Seebohm, Ibis*, 1879, p. 7; *Gould, B. Asia*, pt. xxxi. pl. 8 (1879).
Cyanecula calliope (*Pall.*), *Gray, Gen. B.* i. p. 182 (1848).
Erithacus calliope (*Pall.*), *Degl. Orn. Eur.* i. p. 514 (1849).
Sylvia (Calliope) kamtschatkensis (*Gmel.*), *Middend. Reis. Sibir. Zool.* ii. pt. 2, p. 174 (1853).
Calliope kamtschatcensis (*Gmel.*), *Hartl. Journ. Orn.* 1859, p. 50; *Jerdon, B. Ind.* ii. p. 150 (1863).
Erithacus ignigularis, *Dubois, Ois. Eur.* pl. 61 (1862).
Melodes calliope (*Pall.*), *Newt. List B. Eur. Blasius*, p. 10 (1862).

Lusciola (Calliope) kamtschatkensis (*Gmel.*), *Radde, Reis. Sibir. Vög.* p. 248 (1863).
Cyanecula camtschatkensis (*Gmel.*), *Gray, Hand-l. B.* i. p. 224. no. 3202 (1869).
Lusciola (Melodes) calliope (*Pall.*), *Fritsch, Vög. Eur.* p. 184 (1870).
Calliope kamtschatkensis (*Gmel.*), *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 270 (1870); *Tacz. Bull. Soc. Zool. France*, p. 143 (1876); *Prjev. Rowley's Orn. Misc.* ii. p. 180 (1877); *Hume & Davison, Stray Feath.* vi. p. 337 (1878).

Adult male. General colour of the upper parts a uniform olive-brown, slightly darkest on the head and ear-coverts; lores black; eye-stripes white, meeting in a narrow line over the forehead, and not extending beyond the eye; cheeks white, separated by a narrow dark-brown moustachial line from the chin and throat, which are brilliant glossy scarlet; breast ash-grey, shading into nearly white on the centre of the belly, and into brown on the flanks and thighs; under tail-coverts, axillaries, and under wing-coverts very pale buff. Bill black. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary equal to the sixth or seventh; bastard primary 0·95 to 0·9 inch. Legs, feet, and claws brown. Length of wing 3·15 to 2·85 inches, tail 2·4 to 2·25, culmen 0·65, tarsus 1·2 to 1·0.

The *female* differs from the male in having the white eye-stripe and cheeks pale brown, the black lores and moustachial line brown, the carmine chin and throat pale brown, and the ash-grey breast brown. *Birds of the year* have the brown of both the upper and under parts more ochraceous, and the male resembles the female, except in having traces of red on the throat. *Young in first plumage* appear to be unknown.

The Siberian Ruby-throated Robin breeds throughout Siberia as far north as the Arctic Circle, extending southwards as far as the extreme north of China. It winters in the Philippine Islands, South China, Burmah, and in Northern and Central India, occasionally straying into Europe.

a. ♂ ad. sk.	China.	J. R. Reeves, Esq. [P.].
b, c. ♂ ♀ ad. sk.	Pekin.	J. H. Gurney, Esq. [P.].
d, e. ♂ ad. st.	Calcutta (*As.Soc.*).	India Museum.
f, g. ♀ ♂ ad. sk.	Calcutta (*As.Soc.*).	India Museum.
h, i. ♂ ad.; *k.* ♀ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
l. ♂ ad. sk.	Nepal (*Hodgson*).	India Museum.
m. ♂ ad. sk.	Assam (*M'Clelland*).	India Museum.
n, o. ♂ ad.; *p.* ♀ ad. sk.	Philippine Islands.	Hugh Cuming, Esq. [C.].

13. Erithacus pectoralis.

Calliope pectoralis, *Gould, Icones Avium*, pt. ii. pl. 1 (1837); *Blyth, J. A. S. Beng.* xii. p. 934 (1843); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 69 (1846); *Blyth, J. A. S. Beng.* xvi. p. 135 (1847); *id. Cat. B. Mus. As. Soc.* p. 169 (1849); *Bp. Consp.* i. p. 295 (1850); *Adams, P. Z. S.* 1858, p. 492; *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 313 (1854); *Adams, P. Z. S.* 1859, p. 180;

Blyth, Ibis, 1862, p. 303; *Jerd. B. Ind.* ii. p. 150 (1863); *Beavan, Ibis*, 1867, p. 453; *Pelzeln, Ibis*, 1868, p. 310; *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 270 (1870); *Hume, Nests and Eggs Ind. B.* p. 325 (1874); *Brooks, Stray Feath.* 1875, p. 241; *Dresser, Ibis*, 1876, p. 78; *Gould, B. Asia*, pt. xxxi. p. 9 (1879).

Bradybates pectoralis (*Gould*), *Gray, Gen. B.* i. p. 181 (1846).

Cyanecula pectoralis (*Gould*), *Gray, Hand-l. B.* i. p. 224. no. 3203 (1869).

Calliope ballioni, *Severtz. Turkest. Jevotn.* pp. 65, 122 (1873); *id. Stray Feath.* 1875, p. 429.

Adult male. General colour of the upper parts, including the ear-coverts and the sides of the neck, a uniform dark slate-grey, shading into brown on the crown; lores black; eye-stripes white, meeting in a narrow line over the forehead, extending slightly behind the eye; wings brown, the outer webs of the wing-coverts slate-grey; tail with sometimes two and sometimes four centre feathers plain brown, the remaining feathers dark brown, with the basal half, sometimes of both webs and sometimes only of the inside webs, and a conspicuous terminal spot white. Chin and upper throat glossy scarlet; cheeks, lower throat, and upper breast dull black; belly and under tail-coverts white, shading into slate-grey on the flanks, axillaries, and under wing-coverts. Bill black; rictal bristles almost obsolete. Wing with the third to the sixth primaries nearly equal and longest, second primary about equal to the tenth, bastard primary 1·1 to 0·9 inch, more than half the length of the second. Legs, feet, and claws brown. Length of wing 2·9 to 2·7 inches, tail 2·25 to 2·0, culmen 0·65 to 0·6, tarsus 1·25 to 1·2; outside tail-feathers 0·4 inch shorter than the longest.

The *female* differs from the male in having the general colour of the upper parts a uniform earthy brown; the black on the lores, cheeks, lower throat, and upper breast is replaced by greyish brown, and the scarlet of the chin and upper throat by greyish white; the slate-grey of the flanks, axillaries, and under wing-coverts is replaced by brown; the whole of the tail-feathers are brown, including the basal portions, which are white in the male, but the white terminal spots are retained, though less conspicuously. It is not known that any material change of colour is produced by the autumn moult. It is not known that *females of the year* differ from adults; but *males of the year* have the parts which are black in the adult replaced by slate-grey, and those which are scarlet by greyish white. The upper parts resemble those of the female, except the tail, which resembles that of the adult male. *Young in first plumage* resemble the female, but have pale centres and nearly black edges to most of the small feathers.

The Indian Ruby-throated Robin breeds in the pine-districts of Turkestan, and throughout the Himalayas from Cashmere to Assam, descending into the valleys during the cold season.

a, b. ♂ ♀ ad. sk.	Cashmere.	R. B. Sharpe, Esq. [P.].
c, d. ♂; *e, f.* ♀ ad.; *g.* Juv. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
h. ♂ ad. imm. sk.	Above Dhurmsala.	Capt. Stackhouse Pinwill [P.].

i. ♂ ad. sk.	Kumaon (*Strachey*).	India Museum.
k. ♂ ad. sk.	Nepal (*Hodgson*).	India Museum.
l, m, n. ♂ ad. st.	Nepal (*Hodgson*).	B. H. Hodgson, Esq. [P.].
o. ♂ juv.; *p.* ♀ ad. sk.	Nepal (*Hodgson*).	B. H. Hodgson, Esq. [P.].

14. Erithacus tschebaiewi.

Calliope tschebaiewi, *Prjev. Rowley's Orn. Misc.* ii. p. 180, pl. liv.; fig. 1 (1877); *Gould, B. Asia*, pt. xxxi. pl. 10 (1879).

Adult male. General colour of the upper parts dark slate-grey, suffused with olive-brown on the head and rump; lores black; ear-coverts dark brown; eye-stripe white, not extending far behind the eye; quills brown, edged with olive-brown; lesser wing-coverts dark slate-grey; median wing-coverts edged with dark slate-grey; greater wing-coverts and innermost secondaries olive-brown; tail nearly black, the two centre feathers entirely so, the next on each side tipped with white, the remaining four on each side with the basal half white, except the outside web of the outside feather on each side and a large white spot at the tip; cheeks white, edged with black. Chin and throat glossy scarlet; breast black; axillaries, under wing-coverts, and flanks slate-grey; belly and under tail-coverts white, the latter with slate-grey bases. Bill black. Wings with the fourth, fifth, and sixth primaries nearly equal and longest, second primary about equal to the tenth, bastard primary 1·25 to 1·15 inch. Legs, feet, and claws dark brown. Length of wing 3·25 to 2·9 inches, tail 2·5 to 2·4, culmen 0·66 to 0·6, tarsus 1·32 to 1·25.

The *female* is described by Prjevalsky as having the upper parts dark olive, with white eye-stripe and black lores; the underparts dirty white; the tail dark olive, without the white bases which characterize the male, and with the terminal white spots much smaller. *Birds of the year*, and *young in first plumage*, appear to be unknown.

The Thibet Ruby-throated Robin has hitherto only been found in Kansu and Sikkim. It probably breeds in the pine-regions of these and the intervening country, descending into the valleys during the cold season.

a. ♂ ad. sk.	Sikkim.	Henry Seebohm, Esq. [P.].

15. Erithacus cæruleculus.

Motacilla suecica, *Linn. Syst. Nat.* i. p. 336 (1766, *partim*).
Motacilla cærulecula, *Pallas, Zoogr. Rosso-Asiat.* i. p. 480 (1811).
Ficedula suecica (*Linn.*), *Boie, Isis*, 1822, p. 553 (*partim*).
Curruca suecica (*Linn.*), *Selby, Trans. Nat. Hist. Soc. Northumb.* i. p. 255 (1831).
Cyanecula suecica (*Linn.*), *Brehm, Vög. Deutschl.* p. 350 (1831)*; *Rüpp. Syst. Uebers.* p. 57 (1845); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 70 (1846); *Gray, Gen. B.* i. p. 182 (1846, *partim*); *Blyth, Cat. B. Mus. As. Soc.* p. 167 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 311 (1854); *Heugl. Syst. Uebers.* p. 25 (1856); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 35 (1863); *Gould, B. Gt. Br.* ii. pl. 49 (*circ.* 1869); *Gray, Hand-l. B.* i. p. 223.

* See footnote, p. 336, which applies equally to these names.

no. 3196 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 336 (1869); *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 270 (1870); *Shelley, B. Egypt*, p. 85 (1872); *Dresser, B. Eur.* pt. xxvi. (1874); *Blyth & Wald. B. Burm.* p. 101 (1875); *Dresser, Ibis*, 1875, p. 341; *Blanf. East. Pers.* ii. p. 169 (1876); *Hume & Davison, Stray Feath.* vi. p. 337 (1878); *Adams, Ibis*, 1878, p. 422; *Legge, Birds of Ceylon*, p. 443 (1879).

Cyanecula orientalis, *Brehm, Vög. Deutschl.* p. 351 (1831).

m', Phœnicura suecica (*Linn.*), *Sykes, P. Z. S.* 1832, p. 92; *Jerd. Madr. Journ.* x. p. 267 (1839).

o', *p* Pandicilla suecica (*Linn.*), *Blyth, Field Nat.* i. p. 291 (1833).

q'. ♂ Ruticilla cyanecula (*Wolf*), *apud Macgill. Br. B.* ii. p. 300 (1839).

r'. ♂ Lusciola suecica (*Linn.*), *Keys. u. Blas. Wirb. Eur.* pp. lviii, 190 (1840, *partim*); *Linderm. Vög. Griechenl.* p. 104 (1860); *Severtz. Turkest. Jevotn.* p. 65 (1873).

s'. ♂ ♀ Sylvia suecica (*Linn.*), *Nordm. Démid. Voy. Russ. mérid.* iii. p. 135 (1840).

t'. ♀ Sylvia cyane, *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* fasc. ii. p. 12 (1841, *nec Pall.*).

u'. ♂ Lusciola cyanecula orientalis (*Brehm*), *Schl. Rev. Crit.* 1844, p. xxxii.

v'. Sk Phœnicura suecoides, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. xci. no. 703, *undè*

Calliope suecioides, *Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Cyanecula suecioides, *Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Erithacus suecica (*Linn.*), *Degl. Orn. Eur.* i. p. 513 (1849).

Sylvia cæruligula, *Pall. fide Blyth, Cat. B. Mus. As. Soc.* p. 167 (1849).

Cyanecula cærulecula (*Pall.*), *Bp. Consp.* i. p. 296 (1850); *Cab.* Mus. Hein.* i. p. 1 (1850); *Bp. Rev. Crit.* 1859, p. 155; *Degl. et Gerbe, Orn. Eur.* i. p. 437 (1867); *Gray, Hand-l. B.* i. p. 223. no. 3198 (1869); *Swinh. P. Z. S.* 1871, p. 359; *Tacz.* Bull. Soc. Zool. France*, p. 143 (1876); *David et Oust. Ois. Chine*, p. 234 (1877); *Prjev. Rowley's Orn. Misc.* ii. p. 180 (1877); *Bogd. B. Cauc.* p. 99 (1879).

Cyanecula dichrosterna (*Pall.*), *fide Cab. Mus. Hein.* i. p. 1 (1850); *Gray, Hand-l. B.* i. p. 223. no. 3201 (1869).

Sylvia (Cyanecula) suecica (*Linn.*), var. cærulecula (*Pall.*), *Middend. Reis. Sibir. Zool.* ii. pt. 2, p. 177 (1853).

Cyanecula cyane (*Eversm.*), *Bp. Cat. Parzud.* p. 5 (1856).

Luscinia suecica (*Linn.*), *Sundev. Sv. Fogl.* p. 60 (1856).

Cyanecula suecica (*Linn.*), β. cærulecula (*Pall.*), *Newt. List B. Eur. Blasius*, p. 10 (1862).

Lusciola (Cyanecula) suecica (*Linn.*), vart. cærulecula (*Pall.*), *Radde, Reis. Sibir. Vög.* p. 253 (1863).

Cyanecula suecica (*Linn.*), *Jerd. B. Ind.* ii. p. 152 (1863); *Doderl. Avif. Sicil.* p. 116 (1869); *Harting, Handb. Br. B.* p. 102 (1872).

Lusciola (Cyanecula) suecica (*Linn.*), *Fritsch, Vög. Eur.* p. 184 (1870).

Ruticilla suecica (*Linn.*), *Newt. ed. Yarr. Br. B.* i. p. 321 (1873).

Adult male in breeding-plumage. General colour of the upper parts brown, each feather slightly darkest in the centre, especially on the head and upper tail-coverts; lores dark brown, sometimes black; ear-coverts dark brown; eye-stripe white or buff; wings brown, slightly paler on the edges of each feather; tail dark brown, the terminal three fifths of each feather, except the two centre ones, chestnut. Chin, cheeks, throat, and upper breast metallic cobalt-blue,

* Misspelt *cœrulecula*.

with a large chestnut spot in the centre of the lower throat; below the blue a band of black, and below that a band of chestnut occupying the lower breast; the rest of the underparts, including the axillaries and under wing-coverts, buffish white. Bill black; rictal bristles very small. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 0·8 to 0·65 inch; outside tail-feathers 0·2 inch shorter than the longest. Legs, feet, and claws dark brown. Length of wing 3·2 to 2·8 inches, tail 2·4 to 2·1, culmen 0·6 to 0·5, tarsus 1·1 to 1·05.

The *female* differs from the male in having the whole of the ear-coverts and underparts buffish white, the cheeks continued in a band behind the breast being dark brown. *Old females* have occasionally traces of the blue and chestnut markings of the male. *After the autumn moult* the feathers of the chin, throat, and breast have very broad pale margins, which are cast in spring. *Males of the year* resemble each female. *Young in first plumage* have all the small feathers near the black with pale chestnut centres, which are palest and most predominant on the belly; the wing-coverts and innermost secondaries have broad pale chestnut margins and tips, and the upper tail-coverts are chestnut.

The Arctic Blue-throated Robin breeds within the Arctic Circle, or in the birch-regions at high elevations of more southerly climes, in both Europe and Asia, in the latter continent as far south as Northern Cashmere, occasionally crossing Behring's Straits into Alaska. It winters in North Africa as far south as Abyssinia, and in India and South China.

a, b. ♂ ad. sk.	Bodö, Norway, June 1857 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
c. ♂ ad. sk.	S. Norway, July 1866 (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
d, e. ♂ ad. sk.	Tromsö, Norway, June 13, 1874.	Henry Seebohm, Esq. [P.].
f. ♂ ad. sk.	Petchora river (*J. A. H. B.*).	Captain Feilden and J. A. Harvie Brown, Esq. [P.].
g, h, i, k. ♂ ad. st.	Heligoland.	Henry Seebohm, Esq. [P.].
l, m. ♂ ♀ ad. sk.	Heligoland.	Henry Seebohm, Esq. [P.].
n. ♂ ad. sk.	Minieh, Egypt, March 1, 1875.	J. H. Gurney, Esq. [P.].
o. ♂ ad. sk.	Egypt.	J. Gould, Esq. [P.].
p. ♀ ad. sk.	Egypt (*Dr. Christie*).	G. Turnbull, Esq. [P.].
q. ♂ ad. sk.	Abyssinia.	Purchased.
r. ♂ imm. sk.	Persia.	Purchased.
s. ♂ ad. sk.	Bahu Kalat, Persian Baluchistan, Feb. 3, 1872.	W. T. Blanford, Esq. [C.].
t, u. ♂ ad.; *v.* ♂ imm. sk.	Afghanistan (*Griffith*).	India Museum.
w, x. ♂ ♀ ad. sk.	Valley of Astor, Cashmere, 8000 feet.	R. B. Sharpe, Esq. [P.].
y, z. ♂, *a'.* ♀ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
b'. ♂ ad. sk.	Dinapore.	Capt. Stackhouse Pinwill [P.].

c'. ♂ ad., *d'*. ♀ ad. sk.	Bundelkund, Jan. 1872 (*G. F. L. Marshall*).	R. B. Sharpe, Esq. [P.].
e'. ♂ ad. sk.	East of Chanda, Feb. 28, 1870.	W. T. Blanford, Esq. [P.].
f'. ♀ ad. sk.	Bangalore district, Jan. 20, 1875 (*C. H. T. Marshall*).	R. B. Sharpe, Esq. [P.].
g'. ♂ ad. sk.	Madras.	Sir W. Elliot [P.].
h', *i'*. ♂; *k'*, *l'*. ♀ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
m', *n'*. ♂ ad. sk.	Nepal (*Hodgson*).	India Museum.
o', *p'*. ♂ ♀ ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
q'. ♂ ad. sk.	Tenasserim (*Helfer*).	India Museum.
r'. ♂ ad. sk.	Schtschutschja, Yalmal Peninsula, July 25, 1876.	Dr. O. Finsch [C.].
s'. ♂ ad. sk.	Yenesay, lat. 66½°, June 19, 1877.	Henry Seebohm, Esq. [P.].
t'. ♀ ad. sk.	Yenesay, lat. 66½°, June 11, 1877.	Henry Seebohm, Esq. [P.].
u'. ♂ ad. sk.	Krasnoyarsk, Siberia, May 19, 1878.	Henry Seebohm, Esq. [P.].
v'. Skeleton.	North Europe.	Purchased.

16. Erithacus cyaneculus.

The Blue-throat Redstart, *Edwards, Nat. Hist. B.* i. p. 28, pl. xxviii. (1743).

La Gorge-bleue, *Briss. Orn.* iii. p. 413 (1760); *Buff. Hist. Nat. Ois.* v. p. 206, pl. xii. (1778); *Daubent. Pl. Enl.* no. 610. figs. 1, 2, 3, and no. 361. fig. 2 (1778).

La Gorge-bleue de Gibraltar, *Briss. Orn.* iii. p. 416 (1760).

Motacilla suecica, *Linn. Syst. Nat.* i. p. 336 (1766, *partim*); *Gmel. Syst. Nat.* i. p. 989 (1788); *Bechst. Naturg. Deutschl.* iv. p. 595 (1795).

Blue-throated Warbler, *Lath. Gen. Syn.* ii. p. 444 (1783).

Sylvia suecica (*Linn.*), *Lath. Ind. Orn.* ii. p. 521 (1790); *Bechst.*† *Orn. Taschenb.* i. p. 178 (1802); *Temm. Man. d'Orn.* p. 116 (1815); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 273 (1817); *Temm. Man. d'Orn.* i. p. 216 (1820); *Naum. Naturg. Vög. Deutschl.* ii. p. 414, pl. lxxv. figs. 3, 4, 5 (1822); *Werner, Atlas, Insectiv.* pl. 50 (1842).

Sylvia cyanecula, *Wolf, Taschenb.* i. p. 240 (1810).

Saxicola suecica (*Linn.*), *Koch, Syst. baier. Zool.* i. p. 189 (1816).

Ficedula suecica (*Linn.*), *Boie, Isis*, 1822, p. 553 (*partim*).

Sylvia wolfii, *Brehm, Beitr. zur Vogelk.* ii. p. 173 (1822); *Brehm, Lehrb. d. Naturg.* i. p. 344 (1823).

Cyanecula wolfii (*Brehm*), *Brehm, Vög. Deutschl.* p. 352 (1831)*; *Gray, Hand-l. B.* i. p. 223. no. 3200 (1869); *Dresser, B. Eur.* pt. xxvi. (1874); *Hume, Stray Feath.* vii. p. 391 (1878).

Cyanecula obscura, *Brehm, Vög. Deutschl.* p. 353 (1831)*.

Cyanecula leucocyana, *Brehm, Vög. Deutschl.* p. 353 (1831)*; *Gould, B. Gt. Br.* ii. pl. 50 (1869); *Gray, Hand-l. B.* i. p. 223. no. 3197 (1869).

Phœnicura suecica (*Linn.*), *Gould, B. Eur.* ii. pl. 97 (1837).

Lusciola suecica (*Linn.*), *Keys. u. Blas. Wirb. Eur.* pp. lviii, 190 (1840, *partim*).

Cyanecula suecica (*Linn.*), *Gray, Gen. B.* i. p. 182 (1846, *partim*); *Bp. Consp.* i. p. 296 (1850); *Cab. Mus. Hein.* i. p. 1 (1850); *Jaub.*

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* See footnote, p. 336, which applies equally to these names.

† Misprint *succica*.

et Barth.-Lapomm. Rich. Orn. p. 235 (1859); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Filippi, Viagg. Pers.* p. 347 (1865); *Degl. et Gerbe, Orn. Eur.* i. p. 434 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 222 (1867).

Erythacus cyanecula (*Wolf*), *Degl. Orn. Eur.* i. p. 510 (1849).

Cyanecula longirostris, Cyanecula major, Cyanecula minor, } *Brehm, Naum.* 1855, p. 280.

Ruticilla wolfii (*Brehm*), *Irby, B. Gibr.* p. 82 (1875).

This species differs from the preceding solely in having the large spot in the centre of the lower throat pure silky white instead of chestnut, or in wanting it altogether. No difference is traceable in dimensions, wing-formula, or in the changes of plumage. The geographical range, however, is entirely distinct.

The European Blue-throated Robin breeds in Central Europe, and is rarely found during the breeding-season as far east as Russia. It passes through Southern Europe on migration, and winters in Palestine and North Africa. Stray examples have been known to wander as far east as Persia and India.

a, b. ♂ ♀ ad.; *c.* Juv. sk.	Holland (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
d, e. ♂ ♀ ad. sk.	Valkensvaard, Holland (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
f, g. ♂ ♀ ad. sk.	Holland.	Purchased in London market.
h. ♂ ad. sk.	Heligoland.	Henry Seebohm, Esq. [P.].
i. ♂ ad. sk.	Catala, Valencia, Jan. 24, 1872.	Howard Saunders, Esq. [P.].
k. ♂ ad. sk.	Egypt.	George Turnbull, Esq. [P.].
l. ♀ ad. sk.	Jericho, Palestine.	Canon Tristram [C.].
m, n. ♂ ♀ ad. sk.	Uganda Country.	Sig. Piaggia [C.].

7. MONTICOLA.

	Type.
Monticola, *Boie, Isis*, 1822, p. 552	M. saxatilis.
Petrocincla, *Vigors, Zool. Journ.* ii. p. 396 (1826)..	M. saxatilis.
Petrocossyphus, *Boie, Isis*, 1826, p. 972	M. saxatilis.
Petrophila, *Swains. Class. Birds*, ii. p. 232 (1837) .	M. cinclorhyncha.
Orocetes, *Gray, List Gen. Birds*, p. 21 (1840)	M. cinclorhyncha.
Cyanocincla, *Hume, Nests & Eggs Ind. Birds*, p. 226 (1873)	M. cyanus.

Bill of *Monticola cyanus*.

The genus *Monticola* comprises a small group of birds which connect

the Ousels with the Chats. Like the former the adult males are unspotted on the underparts, and, like the latter, the bill is long and the tail is short, the tail never being four times the length of the culmen. One species (*M. erythrogastra*), however, is aberrant in this respect. All the species have blue chins and throats and chestnut breasts and bellies, except one, in which the chin and throat are chestnut and white, and one in which the breast and belly are also blue. The bill and legs are black, with one exception, in which the legs are brown. The rictal bristles are very small. The female always differs from the male, and has the underparts barred with both pale and dark bars except in one species.

The Rock-Thrushes are Saxicoline in their habits, frequenting open rocky country, breeding in holes in rocks, and laying blue eggs. Most of them are fair songsters.

Two species range throughout South Europe to North China during the breeding-season. One species is resident in Abyssinia, and three in South Africa. Two species breed in the Himalayas, one of which extends also to West China. One species breeds in South-east Siberia and North-east China, whilst another appears to be confined to East China and Japan.

Key to the Species.

a. Belly blue ..... *cyanus*, p. 316.
b. Belly mixed blue and chestnut ..... *cyanus solitaria*, p. 318.
c. Belly chestnut.
  a'. Upper tail-coverts blue.
    a''. Culmen about one third the length of the tail ..... *solitaria*, p. 319.
    b''. Culmen about one fourth the length of the tail ..... *erythrogastra*, p. 325.
  b'. Upper tail-coverts chestnut.
    c''. Throat blue or bluish.
      a'''. No large white patch on the wing; outside tail-feathers chestnut.
        a^4. Centre of back nearly white ..... *saxatilis*, p. 313.
        b^4. Centre of back brown, in strong contrast to the blue head ..... *rupestris*, p. 322.
        c^4. Head and back blue or bluish, or both sooty brown.
          a^5. Length of wing 3·3 to 3·2 inches. *rufocinerea*, p. 327.
          b^5. Length of wing 4·2 to 3·75 inches.
            a^6. Length of tarsus 1·35 to 1·3 inch *explorator*, p. 323.
            b^6. Length of tarsus 1·1 to 1·05 inch *brevipes*, p. 324.
      b'''. A white patch on the wing, formed by the basal half of the outer web of the secondaries being white .. *cinclorhyncha*, p. 320.
    d''. Throat chestnut, with more or less white in the centre ..... *gularis*, p. 326.

1. Monticola saxatilis.

Le Merle de roche, *Briss. Orn.* ii. p. 238 (1760); *Montb. Hist. Nat. Ois.* iii. p. 351, pl. xxiii. (1775); *Daubent. Pl. Enl.* no. 562 (1775).
Le petit Merle de roche, *Briss. Orn.* ii. p. 240 (1760).

Turdus saxatilis, *Linn. Syst. Nat.* i. p. 294 (1766); *Gmel Syst. Nat.* i. p. 833 (1788); *Lath. Ind. Orn.* i. p. 336 (1790); *Bechst. Naturg. Deutschl.* iv. p. 225 (1795); *id. Orn. Taschenb.* i. p. 150 (1802); *Wolf, Taschenb.* i. p. 200 (1810); *Pallas, Zoogr. Rosso-Asiat.* i. p. 446 (1811); *Temm. Man. d'Orn.* p. 92 (1815); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 281 (1818); *Temm. Man. d'Orn.* i. p. 172 (1820); *Nordm. Démid. Voy. Russ. mérid.* iii. p. 129 (1840); *Werner, Atlas, Insectiv.* pl. xx. (1842); *Gray, Gen. B.* i. p. 226 (1847); *id. Hand-l. B.* i. p. 260. no. 3800 (1869).

Rock-Shrike, *Lath. Gen. Syn.* i. p. 176 (1781).

Lesser Rock-Shrike, *Lath. Gen. Syn.* i. p. 177 (1781).

Lanius infaustus, *β.* minor, *Gmel. Syst. Nat.* i. p. 310 (1788).

Turdus infaustus (*Gmel.*), *Lath. Ind. Orn.* i. p. 335 (1790).

Saxicola montana, *Koch, Syst. baier. Zool.* i. p. 185 (1816).

Monticola saxatilis (*Linn.*), *Boie, Isis*, 1822, p. 552; *Blyth, Cat. B. Mus. As. Soc.* p. 165 (1849); *Cab. Mus. Hein.* i. p. 7 (1850); *Loche, Expl. Sci. Algér., Ois.* i. p. 196 (1867); *Heugl. Orn. N.O.-Afr.* i. p. 370 (1869); *Salvad. Faun. Ital. Ucc.* p. 86 (1871); *Newt. ed. Yarr. Br. B.* i. p. 292 (1872); *Shelley, B. Egypt*, p. 70 (1872); *Sharpe & Dresser, B. Eur.* pt. x. (1872); *Hume & Henders. Lahore to Yark.* p. 190 (1873); *Blyth & Wald. B. Burm.* p. 99 (1875); *Irby, B. Gibr.* p. 76 (1875); *Dresser, Ibis*, 1875, p. 335; *Blanf. East. Persia*, ii. p. 156 (1876); *Prjev. Rowley's Orn. Misc.* ii. p. 201 (1877); *David et Oust. Ois. Chine*, p. 160 (1877).

Petrocincla saxatilis (*Linn.*), *Vigors, Zool. Journ.* ii. p. 396 (1826); *Gould, B. Eur.* ii. pl. 86 (1837); *Degl. Orn. Eur.* i. p. 477 (1849); *Bp. Consp.* i. p. 297 (1850); *Hartl. Orn. W.-Afr.* p. 78 (1857); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 219 (1859); *Filippi, Viagg. Pers.* p. 347 (1865); *Degl. et Gerbe, Orn. Eur.* i. p. 446 (1867); *Doderl. Avif. Sicil.* p. 110 (1869); *Fritsch, Vög. Eur.* p. 189 (1870); *Harting, Handb. Br. B.* p. 99 (1872); *Tacz. Bull. Soc. Zool. France*, p. 146 (1876); *Bogd. B. Cauc.* p. 81 (1879).

Petrocossyphus saxatilis (*Linn.*), *Boie, Isis*, 1826, p. 972; *Rüpp. Syst. Uebers.* p. 60 (1845).

Sylvia saxatilis (*Linn.*), *Savi, Orn. Tosc.* i. p. 218 (1827).

Petrocossyphus goureyi, *Brehm, Vog. Deutschl.* p. 370 (1831).

Petrocossyphus polyglottus, *Brehm, Vög. Deutschl.* p. 370 (1831).

Saxicola saxatilis (*Linn.*), *Rüpp. Neue Wirb. Vög.* p. 80 (1835).

Petrochicla saxatilis (*Linn.*), *Keys. u. Blas. Wirb. Eur.* pp. l, 175 (1840); *Linderm. Vög. Griechenl.* p. 83 (1860); *Severtz. Turkest. Jevotn.* p. 65 (1873).

Orocetes saxatilis (*Linn.*), *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 189 (1854).

Petrocincla saxatilis (*Linn.*), *Heugl. Syst. Uebers.* p. 29 (1856).

Petrocinclila saxatilis (*Linn.*), *Newt. List B. Eur. Blasius*, p. 9 (1862).

In the *adult male in breeding-plumage* the entire head and neck, including the lores and the ear-coverts, are cobalt-blue, shading into bluish black on the upper back and scapulars; back white, each feather more or less obscurely margined with bluish grey, the margins entirely obscuring the white on the rump and showing traces of chestnut tips; upper tail-coverts and tail chestnut, except the terminal half of the two centre feathers of the latter, which are brown; wing-coverts dark brown, with obscure white tips; quills brown, most of the secondaries having greyish-white tips. The whole of the underparts below the neck chestnut; the feathers of the centre of the belly with obscure pale tips. Bill black. Wings

with the second and third primaries nearly equal and longest, bastard primary 0·4 to 0·3 inch. Legs, feet, and claws black. Length of wing 4·8 to 4·7 inches, tail 2·5 to 2·4, culmen 0·94 to 0·86, tarsus 1·1 to 1·05.

The *female* has the upper parts an almost uniform brown, each feather having an obscure dark shaft-line and a transverse [illegible]; the upper tail-coverts and the tail are chestnut, the former with obscure, subterminal, transverse bars, and the latter having the two centre feathers brown. The underparts, including the lores and the ear-coverts, are pale chestnut-brown, shading into pale whitish grey on the throat, each feather having a narrow subterminal dark-brown band; axillaries, under wing-coverts, and under tail-coverts pale chestnut. *After the autumn moult* the male has the feathers of the upper parts with chestnut tips and dark-brown subterminal bars, which almost conceal the white on the back; the wing-coverts and quills have conspicuous white tips, and the whole of the feathers of the underparts have nearly white margins. *After the autumn moult* the female also has conspicuous pale tips to the feathers of the back and to the wing-coverts and quills. *Birds of the year* much resemble the female; but the ground-colour of the upper parts of the young male is much bluer, and of the underparts much more chestnut. *Young in first plumage* resemble birds of the year, with the spots somewhat exaggerated.

The Rock-Thrush breeds in Southern Europe and eastwards through Persia, Turkestan, and South Siberia, as far east as Lake Baikal, South-east Mongolia, and North China. It passes through North Africa on migration, and winters in Senegambia and Abyssinia. Eastwards its winter range extends to the borders of India and into North Burma.

a, b. ♂ ♀ ad. st.	Europe.	
c. ♂ ad. sk.	France.	Purchased.
d. ♂ ad. sk.	Hungary.	F. Godman and O. Salvin, Esqrs. [P.].
e, f. ♂ ♀ ad. sk.	Kalamata, Greece.	Consul Merlin [P.].
g, h. ♂ ♀ ad. sk.	Abyssinia.	Purchased.
i. ♂ ad. sk.	Koomaylee, March 24 1868 (*Jesse*).	R. B. Sharpe, Esq.
k. ♂ ad. sk.	Adigrat, Tigré, April 1868.	W. T. Blanford, Esq. [C.].
l. ♀ imm. sk.	Malemba, in Kakongo, Feb. 28, 1877.	Dr. J. M. Hildebrandt [C.].
m. ♂ ad. sk.	Bissao, Senegambia.	R. B. Sharpe, Esq.
n. ♂ ad. sk.	Eklid Pass, N. of Shiraz, Persia.	Colonel St. John [P.].
o. ♂ juv. sk.	Pass to Anan, Elburz Mountains, 8000 feet, August 14, 1872.	W. T. Blanford, Esq. [C.].
p. ♂ ad. sk.	Manrak Geb, near Saissan, June 28, 1876.	Dr. O. Finsch [C.].
q. ♀ ad. sk.	Lepsa, Turkestan, May 16, 1876.	Dr. O. Finsch [C.].
r. Imm. sk.	Gilgit, Cashmere, Sept. 10, 1879.	D. J. Scully [P.].

Monticola cyanus and Monticola solitaria.

This Rock-Thrush has two extreme forms, between which every possible intermediate form occurs.

2. Monticola cyanus.

Le Solitaire, *Briss. Orn.* ii. p. 268 (1760).
Le Merle bleu, *Briss. Orn.* ii. p. 282 (1760); *Montb. Hist. Nat. Ois.* iii. p. 355 (1775).
Turdus cyanus, *Linn. Syst. Nat.* i. p. 296 (1766); *Gmel. Syst. Nat.* i. p. 834 (1788); *Lath. Ind. Orn.* i. p. 345 (1790); *Wolf, Taschenb.* i. p. 203 (1810); *Temm. Man. d'Orn.* p. 94 (1815); *Koch, Syst. baier. Zool.* i. p. 171 (1816); *Temm. Man. d'Orn.* i. p. 174 (1820); *Werner, Atlas, Insectiv.* pl. 21 (1842); *Gray, Gen. B.* i. p. 219 (1847); *Gray, Hand-l. B.* i. p. 260. no. 3805 (1869).
Le Merle solitaire, *Montb. Hist. Nat. Ois.* iii. p. 358 (1775); *Daubent. Pl. Enl.* no. 250 (1775).
Blue Thrush, *Lath. Gen. Syn.* ii. p. 51 (1783).
Solitary Thrush, *Lath. Gen. Syn.* ii. p. 52 (1783).
Turdus solitarius, *Gmel. Syst. Nat.* i. p. 834 (1788, *nec Müll.*); *Lath. Ind. Orn.* i. p. 345 (1790).
Monticola cyana (*Linn.*), *Boie, Isis*, 1822, p. 552; *Cab. Mus. Hein.* i. p. 7 (1850); *Heugl. Orn. N.O.-Afr.* i. p. 371 (1869); *Salvad. Faun. Ital. Ucc.* p. 85 (1871); *Shelley, B. Egypt*, p. 70 (1872); *Blanf. East. Persia*, ii. p. 155 (1876); *Legge, Birds of Ceylon*, p. 460 (1879); *Bodg. B. Cauc.* p. 81 (1879).
Sylvia solitaria (*Gmel.*), *Savi, Orn. Tosc.* p. 217 (1827).
Petrocossyphus cyaneus (*Linn.*), *Boie, Isis*, 1828, p. 319; *Bp. Comp. List B. Eur. & N. Amer.* p. 16 (1838); *Rüpp. Syst. Uebers.* p. 60 (1845); *Bp. Consp.* i. p. 297 (1850); *Jerd. B. Ind.* i. p. 511 (1862); *Loche, Expl. Sci. Algér., Ois.* i. p. 194 (1867); *Hume & Henders. Lahore to Yark.* p. 190 (1873); *Blyth & Wald. B. Burm.* p. 99 (1875).
Petrocincla pandoo, *Sykes, P. Z. S.* 1832, p. 87 (♂); *Jerd. Madr. Journ.* x. p. 252 (1839); *Blyth, J. A. S. Beng.* xii. p. 182 (1843).
Petrocincla maal, *Sykes, P. Z. S.* 1832, p. 87 (= ♀).
Saxicola cyanea (*Linn.*), *Rüpp. Neue Wirb. Vög.* p. 80 (*circ.* 1835).
Petrocincla cyanus (*Linn.*), *Gould, B. Eur.* ii. pl. 87 (1837).
Petrocichla cyanus (*Linn.*), *Keys. u. Blas. Wirb. Eur.* pp. I, 175 (1840).
Petrocincla cyanea (*Linn.*), *Degl. Orn. Eur.* i. p. 479 (1849); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 220 (1859); *Degl. et Gerbe, Orn. Eur.* i. p. 447 (1867); *Fritsch, Vög. Eur.* p. 190 (1870); *Blanf. Geol. & Zool. Abyss.* p. 357 (1870); *Swinhoe, P. Z. S.* 1871, p. 368.
Petrocincla affinis, *Blyth, J. A. S. Beng.* xii. p. 177* (1843, *partim*); *id. J. A. S. Beng.* xvi. p. 151 (1847); *id. Cat. B. Mus. As. Soc.* p. 164 (1849).
Turdus azureus, *Crespon, Faun. Merid.* p. 179 (1844).
Petrocossyphus pandoo (*Sykes*), *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 79 (1846); *Bp. Consp.* i. p. 297 (1850).
Petrocincla longirostris, *Blyth, J. A. S. Beng.* xvi. p. 150 (1847).
Turdus affinis (*Blyth*), *Gray, Gen. B.* i. p. 219 (1847).
Petrocincla cyaneus (*Linn.*), *Blyth, Cat. B. Mus. As. Soc.* p. 164 (1849).
Petrocossyphus affinis (*Blyth*), *Bp. Consp.* i. p. 297 (1850).
Petrocossyphus cyanus (*Linn.*), *Heugl. Syst. Uebers.* p. 29 (1856); *Gould, B. Gt. Br.* ii. pl. 43 (1863); *Sharpe & Dresser, B. Eur.* pt. viii. (1871); *Irby, B. Gibr.* p. 74 (1875); *Dresser, Ibis*, 1875, p. 335.

Petrocichla cyana (*Linn.*), *Linderm. Vög. Griechenl.* p. 83 (1860).
Petrocinchla cyanus (*Linn.*), *Newt. List B. Eur. Blasius*, p. 9 (1862).
Turdus pandoo (*Sykes*), *Gray, Hand-l. B.* i. p. 260. no. 3806 (1869).
Petrocichla cyane (*Linn.*), *Severtz. Turkest. Jevotn.* p. 65 (1873).
Cyanocincla cyanus (*Linn.*), *Hume, Nests & Eggs Ind. B.* p. 226 (1873).
Cyanocincla cyana (*Linn.*), *Ball, Stray Feath.* 1874, p. 407; *Hume & Davison, Stray Feath.* vi. p. 247 (1878).
Monticola affinis (*Blyth*), *David et Oust. Ois. Chine*, p. 162 (1877).
Monticola cyanea (*Linn.*), *David et Oust. Ois. Chine*, p. 163 (1877).
Cyanocincla solitaria (*Gmel.*), *Hume & Davison, Stray Feath.* vi. p. 250 (1878).

In the *adult male in breeding-plumage* the general colour is dark slate-grey suffused with metallic cobalt-blue, most so on the head and least so on the under tail-coverts; lores dark slate-grey; wings, wing-coverts, and tail dark brown, the outer web of each feather margined with blue; under tail-coverts with white tips and obscure subterminal dark bars. Bill black. Wing with the third and fourth primaries nearly equal and longest, second primary about equal to the fifth, bastard primary 0·95 to 0·9 inch. Legs, feet, and claws black. Length of wing 5·05 to 4·4 inches, tail 3·3 to 3·1, culmen 1·1 to 0·9, tarsus 1·15 to 1·0.

After the autumn moult most of the feathers have narrow greyish-white margins, those of the upper parts with obscure brown subterminal bars, and those of the underparts with darker brown subterminal bars, almost obsolete on the chin and throat. These marginal and subterminal bars are cast during March, leaving the male in full breeding-plumage. The *female* somewhat resembles the autumn plumage of the male, but is much more brown, being far less suffused with blue. The whole of the underparts are pale whitish brown, slightly suffused with blue on the breast and belly, each feather having a dark-brown subterminal transverse band, which on the throat is continued on the margins of the feathers; the axillaries and under wing-coverts have several transverse dark bars. *Birds of the year* and *young in first plumage* differ from the female very slightly.

The Blue Rock-Thrush breeds in Southern Europe, extending eastwards through Persia, Turkestan, Afghanistan, and South-west China. It winters in North Africa as far south as Abyssinia, throughout the whole of the peninsula of India, and in Burma and South China.

a. ♀ ad. st.	Europe.	
b. ♀ ad. sk.	Bordighera, Riviera, N. Italy, March 1869 (*A. B. Brooke*).	R. B. Sharpe, Esq. [P.].
c. ♂ ad. sk.	Mount Taygetos.	Consul Merlin [P.].
d. ♂ ad. sk.	Tunis, March 8, 1867 (*O. S.*).	F. Godman and O. Salvin, Esqrs.
e. ♂ ad. sk.	Abyssinia.	R. B. Sharpe, Esq.
f, *g*. ♂ ♀ ad. sk.	Senafé, Tigré, March 1868.	W. T. Blanford, Esq. [C.].
h. ♂ ad. sk.	Egypt.	Sir S. Baker [P.].
i. ♂ ad. sk.	Sidon, Palestine.	Canon Tristram [C.].
k. ♂ ad. sk.	Near Shiraz, Persia.	Col. St. John [C.].

l. ♂ juv. sk.	Karij valley, Elburz Mountains, August 9, 1872.	W. T. Blanford, Esq. [C.].
m. ♂ ad.; *n*, *o*. Juv. sk.	Afghanistan (*Griffith*).	India Museum.
p, *q*. ♂; *r*. ♀ ad. sk.	Himalayas.	India Museum.
s, *t*. ♂ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
u. ♂ ad. sk.	Kumaon (*Strachey*).	India Museum.
v, *w*. ♂ ad.; *x*, *y*. ♀ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.].
z, *a'*. ♂ ad.; *b'*. ♀ ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
c'. ♂ ad. sk.	Kalsi, April 14, 1868 (*G. F. L. Marshall*).	R. B. Sharpe, Esq. [P.].
d'. ♂ ad. sk.	Punjaub.	Brigadier-Gen. Hearsey [P.].
e'. ♂ ad. sk.	Jetpore, Kattiawar, Nov. 12, 1871.	Major Hayes Lloyd [P.].
f', *g'*. ♂ sk.	Deccan (*Sykes*).	India Museum. (Types of *Petrocincla pandoo*, Sykes.)
h'. ♀ ad. sk.	Deccan (*Sykes*).	India Museum. (Type of *Petrocincla maal*, Sykes.)
i'. ♀ imm. sk.	Kamptee, C. India.	Dr. B. Hinde [P.].
k'. ♂ imm. sk.	Madras.	Sir W. Elliot [P.].
l'. ♂ ad. st.	Bootan (*Pemberton*).	India Museum.
m'. ♂ ad. sk.	Bootan (*Pemberton*).	India Museum.
n'. ♂ ad. sk.	Bhamau, Upper Burma, February 2, 1868.	Dr. C. Anderson [C.].
o'. ♂ ad. sk.	Ava.	W. T. Blanford, Esq. [P.].
p'. ♀ ad. sk.	Tenasserim.	J. C. D. Packman, Esq. [P.]
q'. ♀ ad. sk.	Cochin China.	M. E. Pierre [P.].
r'. ♀ ad sk.	Shanghai.	J. Webb, Esq. [P.].
s'. ♀ ad. sk.	Shanghai.	J. R. Reeves, Esq.
t'. ♂ ad. sk.	Amoy, Sept. 12, 1859 (*R. Swinhoe*).	F. Godman and O. Salvin, Esqrs. [P.].
u'. ♀ ad. sk.	Amoy, Spring 1861 (*R. Swinhoe*).	F. Godman and O. Salvin, Esqrs. [P.].
v'. ♀ ad. sk.	S.W. Formosa, 1861 (*R. Swinhoe*).	F. Godman and O. Salvin, Esqrs. [P.]
w', *x'*. Skeletons.	Europe.	Zoological Society.
y'. ♂ ad. sk.	Gilgit, Cashmere, April 29, 1879.	Dr. J. Scully [P.].
z'. ♀ ad. sk.	Gilgit, Cashmere, Oct. 6, 1879.	Dr. J. Scully [P.].

Monticola cyanus solitaria.

Intermediate forms or fertile hybrids between these two conspecies must bear both names, the name of the subspecies to which the intermediate form approaches nearest having the precedence. One of these was described as a species by Blyth, and its synonymy will be as follows :—

Petrocincla affinis, *Blyth, J. A. S. Beng.* xii. p. 177* (1843, *partim*).
Turdus (Monticola) erythropterus, *Gray, P. Z. S.* 1860, p. 350.
Petrocossyphus cyaneus (*Linn.*) ?, *apud Jerd. B. Ind.* i. p. 512 (1862), *apud Blyth & Wald. B. Burm.* p. 99 (1875, *partim*).
Monticola affinis (*Blyth*), *David et Oust. Ois. Chine*, p. 162 (1877).

Intermediate forms in every stage, from entirely blue underparts with only a few chestnut feathers on the under tail-coverts, to nearly thorough-bred examples of the Eastern form, which show only a few blue feathers on the chestnut belly, occur in South China, Burma, and in Japan, the two subspecies apparently interbreeding freely in some parts of North-east China.

a. ♂ ad. sk.	Japan (*Leyden Museum*).	F. Godman and O. Salvin, Esqrs.
b. ♂ ad. sk.	Amoy (*Leyden Museum*).	F. Godman and O. Salvin, Esqrs.
c, d. ♂ ad. sk.	Formosa (*R. Swinhoe*).	F. Godman and O. Salvin, Esqrs.
e. ♂ ad. sk.	N. Formosa.	G. E. Hobson, Esq. [P.].
f. ♀ imm. st.	Philippine Islands.	Hugh Cuming, Esq. [P.].
g. ♂ ad. sk.	Panaon, Oct. 1877.	Alfred Everett, Esq. [C.].
h. ♂ ad. sk.	Labuan Island, February 1872.	Governor Ussher [C.].
i. ♂ ad. sk.	Bintulu, N.W. Borneo, Nov. 14, 1875.	Alfred Everett, Esq. [P.].
k. ♂ ad. sk.	Gilolo, 1858.	A. R. Wallace, Esq. [C.]. (Type of *Turdus erythropterus*, Gray.)
l. ♂ ad. sk.	Tenasserim.	J.C.D. Packman, Esq. [P.].
m, n. ♂ ad. sk.	Tenasserim (*Helfer*).	India Museum.
o, p. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].

3. Monticola solitaria.

Le Solitaire de Manille, *Briss. Orn.* ii. p. 270, pl. xxxiii. fig. 2 (1760).

Le Solitaire de Philippines, *Briss. Orn.* ii. p. 272, pl. xxviii. fig. 1 (1760).

Le Merle solitaire de Manille, *Montb. Hist. Nat. Ois.* iii. p. 363 (1775); *Daubent. Pl. Enl.* no. 564. fig. 2 (1775); *id. Pl. Enl.* no. 636 (1775, ♂).

Le Merle solitaire de Philippines, *Montb. Hist. Nat. Ois.* iii. p. 364 (1775); *Daubent. Pl. Enl.* no. 339 (1775).

Turdus solitarius, *P. L. S. Müll. S. N.*, Anhang, p. 142 (1776); *Gray, Hand-l. B.* i. p. 260. no. 3807 (1869).

Turdus philippensis, *P. L. S. Müll. S. N.*, Anhang, p. 145 (1776); *Bodd. Tabl. Pl. Enl.* p. 21 (1783); *Gray, Gen. B.* i. p. 220 (1847); *id. Hand-l. B.* i. p. 260. no. 3807 (1869).

Pensive Thrush, *Lath. Gen. Syn.* ii. p. 53 (1783).

Hermit Thrush, *Lath. Gen. Syn.* ii. p. 54 (1783).

Turdus manilla, *Bodd. Tabl. Pl. Enl.* p. 39 (1783).

Turdus manillensis, *Gmel. Syst. Nat.* i. p. 833 (1788); *Lath. Ind. Orn.* i. p. 345 (1790); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 288 (1818); *Gray, Gen. B.* i. p. 220 (1847); *Temm. et Schleg. Faun. Japon. Aves*, p. 6 (1847).

Turdus eremita, *Gmel. Syst. Nat.* i. p. 833 (1788); *Lath. Ind. Orn.* i. p. 346 (1790); *Vieill. N. Dict. d'Hist. Nat.* xx. p. 288 (1818).

Petrocincla manillensis (*Gmel.*), *Blyth, J. A. S. Beng.* xi. p. 460 (1842); *id. J. A. S. Beng.* xvi. p. 151 (1847); *id. Cat. B. Mus. As. Soc.* p. 164 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 188 (1854); *Cassin, Perry's Exp. to Japan*, p. 240 (1856); *Swinhoe, Ibis*, 1862, p. 307.

Petrocincla eremita (*Gmel.*), *Bp. Consp.* i. p. 297 (1850).

Petrocossyphus manillensis (*Gmel.*), *Bp. Consp.* i. p. 297 (1850); *Swinhoe, Ibis*, 1860, p. 56.

Petrocincla violacea, *Swinhoe, Zoologist*, 1858, p. 6228.

Petrocincla manilla (*Bodd.*), *Swinhoe, P. Z. S.* 1871, p. 368.; *Tacz. Bull. Soc. Zool. France*, 1876, p. 146.
Monticola solitaria (*Müll.*), *Wald. Tr. Z. S.* viii. p. 63 (1872); *id. Tr. Z. S.* ix. p. 192 (1875); *David et Oust. Ois. Chine*, p. 161 (1877).
Cyanocincla solitaria (*Müll.*), *Hume & Davison, Str. F.* vi. p. 248 (1878).

This species differs from the preceding only in being somewhat more suffused with metallic cobalt-blue on the upper parts, and in having the axillaries, under wing-coverts, lower breast, belly, flanks, and under tail-coverts rich deep chestnut; the thighs are blue, and the under tail-coverts have white tips and obscure subterminal dark bars as in the allied species. Bill black. Wing with the third and fourth primaries nearly equal and longest, second primary generally slightly shorter than the fifth, bastard primary 1·15 to 0·8 inch. Legs, feet, and claws black. Length of wing 5·0 to 4·5 inches, tail 3·4 to 3·26, culmen 1·0 to 0·9, tarsus 1·2 to 1·1.

After the autumn moult most of the feathers of the upper parts have pale brown margins (palest on the wing-coverts) and obscure dark-brown subterminal bars. The blue feathers of the underparts are similarly marked, but in the chestnut feathers traces only of the subterminal dark bars are observable. These marginal and subterminal bars are cast during March, leaving the male in full breeding-plumage. The *female* much resembles the autumn plumage of the male, except that the blue of the upper parts is much duller and the whole of the underparts are pale whitish brown, suffused with pale buffish brown on the axillaries and under wing- and tail-coverts; each feather on the underparts has a dark-brown subterminal transverse band, which on the throat is continued on the margins of the feathers; the axillaries and the under tail-coverts have several transverse dark bars. After the autumn moult the only difference perceptible in the female is that the pale brown margins of the feathers are somewhat longer. *Males of the year* scarcely differ from adult females, except in having the ground-colour of the underparts, especially on the breast and belly, tinged with blue. *Females of the year* have the ground-colour of the upper parts brown, only slightly tinged with blue on the wing-coverts, rump, and upper tail-coverts. *Young in first plumage* differ very slightly from the females of the year, but have scarcely a trace of blue.

The Eastern Blue Rock-Thrush breeds in Japan and in the valley of the Ussuri, in North-east China, and in Formosa. It winters in South-east China and the islands of the Malay Archipelago.

a. ♂ ad. sk.	Yokohama, Japan.	H. Pryer, Esq. [C.].
b, c. ♂ ad. sk.	Saigon, Cochin China.	M. E. Pierre [C.].
d. ♀ ad. sk.	Lumbidan, N.W. Borneo.	Governor Ussher [C.].
e. ♂ ad. sk.	Celebes, Sept. 27, 1863 (*Von Rosenberg*).	F. Godman and O. Salvin, Esqrs. [P.].
f. ♀ ad. sk.	Celebes, Oct. 2, 1863 (*Von Rosenberg*).	F. Godman and O. Salvin, Esqrs. [P.].

4. Monticola cinclorhyncha.

Black-collared Thrush, var. A, *Lath. Gen. Hist. B.* v. p. 49 (1822).
Petrocincla cinclorhyncha, *Vigors, P. Z. S.* 1831, p. 172; *Gould, Cent.*

B. Himal. M. letterpress to pl. xix. (1832); *Sykes, P. Z. S.* 1832, p. 88.

Phœnicura cinclorhyncha (*Vigors*), *Gould, Cent. B. Himal. M.* pl. xix. (1832).

Turdus (Petrocincla) melanotus, *Du Bus, Bull. Ac. Sci. Brux.* vi. pt. 1, p. 506 (1839); *Gray, Gen. B.* i. p. 220 (1847).

Petrophila cinclorhyncha (*Vigors*), *Jerd. Madr. Journ.* x. p. 252 (1839); *Hume, Nests & Eggs Ind. B.* p. 227 (1873).

Petrocossyphus aurantiiventer, *Less. Rev. Zool.* 1840, p. 166.

Petrocossyphus cinclorhynchus (*Vigors*), *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 79 (1846).

Monticola cinclorhyncha (*Vigors*), *Blyth, J. A. S. Beng.* xvi. p. 152 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 164 (1849).

Turdus cinclorhynchus (*Vigors*), *Gray, Gen. B.* i. p. 220 (1847); *id. Hand-l. B.* i. p. 261. no. 3808 (1869).

Orocetes cinclorhynchus (*Vigors*), *Bp. Consp.* i. p. 297 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 188 (1854); *Jerd. B. Ind.* i. p. 515 (1862).

Orocoetus cinclorhynchus (*Vigors*), *Blyth & Wald. B. Burm.* p. 99 (1875).

In the *adult male in breeding-plumage* the forehead, crown, nape, chin, upper throat, and cheeks are cobalt-blue; lores, ear-coverts, sides of neck, back, and scapulars black; wings dark brown, the basal half of the outside webs of the secondaries white, the outside webs of the primaries, primary-coverts, greater and median coverts edged with dull blue; lesser wing-coverts cobalt-blue. Rump, upper tail-coverts, and the whole of the underparts, including the axillaries and under wing-coverts, chestnut, except the chin and upper throat; inner margin of quills pale brown; tail dark brown, the outside webs of the feathers margined with dull blue. Bill nearly black. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 1·0 to 0·9 inch. Legs, feet, and claws brown. Length of wing 4·12 to 3·9 inches, tail 3·0 to 2·6, culmen 0·9 to 0·85, tarsus 1·0 to 0·9.

In the *adult female in breeding-plumage* the general colour of the upper parts is greyish olive-brown, the rump and upper tail-coverts barred with dark brown and brownish white; wings and tail brown, the basal half of the outside webs of the secondaries edged with russet-brown: the whole of the underparts greyish white, each feather with a subterminal, narrow, dark brown bar; axillaries and under wing-coverts pale ochraceous barred with dark brown. *After the autumn moult* each cobalt-blue and black feather of the male has a brown margin, which is cast in the spring. The autumnal margins of the brown feathers of the female are only very slightly paler than the body of the feather. *Birds of the year* differ from adults only in having ochraceous tips to the greater wing-coverts. *Young in first plumage* resemble the female on the underparts, and have all the small feathers of the upper parts similarly marked, the quills and tail-feathers of the young male resembling those of the adult male, and those of the young female, especially the tail, being russet-brown. *Very old females* are said to assume the male plumage.

The Indian Rock-Thrush breeds throughout the Himalayas, migrating to the plains in winter. It has also been recorded from the mountain-ranges of Western India, but it seems doubtful at what period of the year.

a. Ad. st.	India.	J. R. Reeves, Esq. [P.].
b. ♀ ad. sk.	Cashmere.	R. B. Sharpe, Esq. [P.].
c, *d*. ♂ ad. juv.; *e*. ♀ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
f, *g*. ♂ ad. sk.	Kangra.	Capt. Stackhouse Pinwill [P.].
h. ♂, *i*. ♀ ad. sk.	Kumaon (*Strachey*).	India Museum.
k, *l*, *m*. Juv. sk.	Nepal.	B. H. Hodgson, Esq.
n. ♀ ad.; *o*, *p*. Juv. sk.	Nepal.	B. H. Hodgson, Esq.
q, *r*. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq.
s. ♂ ad. sk.	Nepal (*Hodgson*).	India Museum.
t. ♂ ad. sk.	Matheran, Jan. 25, 1872.	Major Hayes Lloyd.
u. ♂ ad. sk.	Coorg (*Day*).	India Museum.
v. ♂ ad. sk.	Saugor (*Hooper*).	India Museum.
w, *x*. ♂ ad.; *y*. ♀ ad. sk.	Mynall, Travancore, Dec. 1878.	F. W. Bourdillon, Esq. [C.].
z. Sternum.	Nepal.	B. H. Hodgson, Esq. [P.].

5. Monticola rupestris.

Le Rocar, *Levaill. Ois. d'Afr.* iii. p. 22, pls. ci., cii. (1802).
Turdus rupestris, *Vieill. N. Dict. d'Hist. Nat.* xx. p. 281 (1818); *Bonn. et Vieill. Enc. Méth.* ii. p. 671 (1823); *Gray, Gen. B.* i. p. 220 (1847); *id. Hand-l. B.* i. p. 260. no. 3801 (1869).
Turdus rupicola, *Licht. Verz. Doubl.* p. 38 (1823).
Turdus rocar, *Stephens, Shaw's Gen. Zool.* xiii. pt. 2, p. 199 (1826).
Petrocincla rupestris (*Vieill.*), *Bp. Consp.* i. p. 297 (1850); *Layard, B. S. Afr.* p. 129 (1867); *Gurney, Ibis*, 1868, p. 50.
Monticola rupestris (*Vieill.*), *Cab. Mus. Hein.* i. p. 7 (1850); *Sharpe, ed. Layard's B. S. Afr.* p. 219 (1876).

In the *adult male in breeding-plumage* the forehead, crown, nape, chin, throat, and sides of the neck are dull blue, the feathers of the crown with indistinct brown shaft-lines; lores dark brown; ear-coverts dull blue suffused with brown; back and scapulars russet-brown, each feather with a dark shaft-line and slightly paler margin; wings and wing-coverts brown, the lesser median and greater wing-coverts and innermost secondaries margined with chestnut. Rump, upper tail-coverts, and tail, and the whole of the underparts below the throat, including the axillaries and under wing-coverts, chestnut, except the terminal three fourths of the two centre tail-feathers, which are brown. Bill black. Wing with the third, fourth, fifth, and sixth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 1·25 to 1·1 inch. Legs, feet, and claws dark brown. Length of wing 4·45 to 4·15 inches, tail 3·3 to 2·85, culmen 1·1 to 1·05, tarsus 1·3 to 1·15.

The *adult female in breeding-plumage* resembles the male, except in having the forehead, crown, nape, chin, throat, and sides of the neck the same colour as the back. *After the autumn moult* the blue feathers of the head of the male have indistinct pale brown margins,

and the edges of the feathers generally are paler. *Birds of the year* have the pale tips to the wing-coverts more pronounced, and the female has subterminal dark bars across the feathers of the breast, probably remains of first plumage. *Young in first plumage* appear to be unknown.

The Brown-backed Rock-Thrush appears to be confined to the Cape Colony and Natal, where it is supposed to be a resident.

a. ♂ ad. st.	Cape Colony.	J. Gould, Esq.
b. ♀ ad. sk.	South Africa.	R. B. Sharpe, Esq.
c. ♂ ad. sk.	Cape Town (*C. J. Andersson*).	R. B. Sharpe, Esq.
d. ♂ ad. sk.	Cape Town, April 24, 1866 (*C. J. Andersson*).	R. B. Sharpe, Esq.
e. ♀ ad. sk.	Cape Town, May 1, 1866 (*C. J. Andersson*).	R. B. Sharpe, Esq.
f. ♂ ad. sk.	Hottentot's Holland (*J. Verreaux*).	R. B. Sharpe, Esq.
g, *h*. ♂ ♀ ad. sk.	Elands Post, May 1870 (*T. C. Atmore*).	R. B. Sharpe, Esq.
i. ♂ ad. st.	South Africa.	R. B. Sharpe, Esq.

6. Monticola explorator.

L'Espionneur, *Levaill. Ois. d'Afr.* iii. p. 29, pl. ciii. (1802).
Turdus explorator, *Vieill. N. Dict. d'Hist. Nat.* xx. p. 260 (1818); *Bonn. et Vieill. Enc. Méth.* ii. p. 658 (1823); *Gray, Gen. B.* i. p. 220 (1847); *Sundev. K. Vet.-Ak. Handl.* ii. p. 35 (1857); *Gray, Hand-l. B.* i. p. 220. no. 3802 (1869).
Turdus perspicax, *Stephens, Shaw's Gen. Zool.* xiii. pt. 2, p. 198 (1826).
Saxicola explorator (*Vieill.*), *Gray, Gen. B.* i. p. 179 (1846).
Petrocincla explorator (*Vieill.*), *Bp. Consp.* i. p. 297 (1850); *Layard, B. S. Afr.* p. 130 (1867).
Monticola explorator (*Vieill.*), *Sharpe, ed. Layard's B. S. Afr.* p. 220 (1876).

In the *adult male in breeding-plumage* the forehead is azure-blue, shading into bluish slate-grey on the crown, nape, back, and scapulars; lores dark brown; quills and primary-coverts brown with pale margins; greater and median wing-coverts slate-grey; lesser wing-coverts azure-blue. Rump, upper tail-coverts, and tail chestnut, except the terminal three fourths of the two central tail-feathers and a short terminal margin to the outside webs of the other tail-feathers, which are dark brown; chin, throat, breast, cheeks, and sides of the neck cobalt-blue; the rest of the under-parts, including the axillaries and under wing-coverts, chestnut. Bill black. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·95 inch. Legs, feet, and claws black. Length of wing 4·1 to 3·75 inches, tail 2·5 to 2·4, culmen 0·95 to 0·93, tarsus 1·35 to 1·3.

In the *adult female in breeding-plumage* the general colour of the upper parts is sooty brown; wings dark brown, paler on the margins of the feathers, and becoming slate-grey on the median and lesser wing-coverts; rump, upper and under tail-coverts, and

tail coloured as in the male; chin, throat, breast, and flanks buffish white mottled with brown; axillaries, under wing-coverts, and under tail-coverts chestnut; centre of belly pale chestnut. *After the autumn moult* the blue-grey feathers of the upper and under parts of the male are obscurely edged with brown, and the chestnut feathers of the breast have pale edges. The upper parts of the female are a darker brown, and the ground-colour of the underparts more chestnut. *Birds of the year* do not apparently differ much from adults. *Young in first plumage* resemble the female on the underparts, and have pale tips to the feathers of the upper parts.

The Long-legged Rock-Thrush appears to be confined to South Africa, having been obtained at Cape Town and Kingwilliamstown. It is not known to be a migratory bird.

a, *b*. ♂ ♀ ad. sk.	Cape Town (*Andersson*).	R. B. Sharpe, Esq. [P.].
c, *d*. ♂ ♀ ad. sk.	Cape Town, April 24, 1868 (*Andersson*).	R. B. Sharpe, Esq. [P.].
e. ♂ ad.; *f*, *g*. ♀ ad. sk.	Kingwilliamstown.	Lieut. H. Trevelyan [P.].
h, *i*. ♂ ♀ ad. sk.	Kingwilliamstown, May & June, 1867.	Lieut. H. Trevelyan [P.].
k. Imm. sk.	Macamac, Nov. 20, 1873 (*T. Ayres*).	J. H. Gurney, Esq. [P].
l. ♂ ad. sk.	South Africa.	Sir A. Smith [C.].
m. Ad. sk.	South Africa.	Major-General Hardwicke [P.].
n. ♂ ad. sk.	Kaar Kloof heights, May 19 (*F. Oates*).	C. G. & W. Oates, Esqrs. [P.].

7. Monticola brevipes.

Monticola brevipes, *Strickl. & Sclat. Contr. Orn.* 1852, p. 147; *Sharpe, Cat. Afr. B.* p. 25 (1871); *Gurney, Anderss. B. Dam. Ld.* p. 116 (1872); *Sharpe, ed. Layard's B. S. Afr.* p. 221 (1875); *Bocage, Jorn. Sci. Math. Lisb.* vi. p. 154 (1877), pp. 197, 274 (1878).

Petrocincla explorator (*Vieill.*), *apud Chapman, Trav. S. Afr.* ii. p. 399 (1868).

Petrocincla brevipes (*Strickl. & Sclat.*), *Bocage, Jorn. Sci. Math. Lisb.* ii. p. 342 (1869).

Petrocincla rupestris (*Vieill.*), *apud Ayres, Ibis*, 1876, p. 427.

In the *adult male in breeding-plumage* the colour is similar to that of *M. explorator*, but with the forehead and crown bluish white, shading into pale slate-grey on the nape; tarsus much shorter. Length of wing 4·2 to 3·95 inches, tail 2·61 to 2·56, culmen 1·0 to 0·9, tarsus 1·1 to 1·01.

The *adult female in breeding-plumage* differs from that of *M. explorator* in having the upper parts sandy brown rather than sooty brown; the chin, throat, cheeks, and ear-coverts have each feather nearly white with a brown margin. *After the autumn moult* males resemble the breeding-plumage of males of *M. explorator*, and are scarcely distinguishable except by the shorter tarsus. *Birds of the year* and *young in first plumage* appear to be unknown.

The Short-legged Rock-Thrush is found in Damaraland, Griqualand, and the Transvaal, where it is supposed to be resident.

a, b. ♂ ad. sk.	South Africa.	Purchased.
c. ♂ ad. sk.	Hope Town (*T. C. Atmore*).	R. B. Sharpe, Esq.
d. ♂ ad. sk.	Damara Land.	C. J. Andersson, Esq. [C.].
e, f. ♂ ♀ ad. sk.	Otjimbinque, Damara Land (*C. J. Andersson*).	R. B. Sharpe, Esq.

8. Monticola erythrogaster.

Turdus erythrogaster, *Vigors, P. Z. S.* 1831, p. 171; *Gould, Cent. B. Himal. M.* pl. xiii. (1832); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 81 (1846); *id. Gen. B.* i. p. 219 (1847); *id. Hand-l. B.* i. p. 261. no. 3809 (1869).

Petrocincla rufiventris, *Jard. & Selby, Ill. Orn.* pl. cxxix. (1835).

Petrocossyphus ferrugineoventer, *Lesson, Rev. Zool.* 1840, p. 166.

Turdus (Petrocincla) erythrogastra (*Vigors*), *Blyth, J. A. S. Beng.* xi. p. 189 (1842), xii. p. 929 (1843).

Petrocincla erythrogastra (*Vigors*), *Blyth, J. A. S. Beng.* xi. p. 461 (1842), xvi. p. 149 (1847); *id. Cat. B. Mus. As. Soc.* p. 164 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 185 (1854).

Orocetes erythrogastra (*Vigors*), *Bp. Consp.* i. p. 298 (1850); *Cab. Mus. Hein.* i. p. 7 (1850); *Jerd. B. Ind.* i. p. 514 (1862); *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 268 (1870); *Hume & Davison, Stray Feath.* vi. p. 250 (1878).

Petrophila erythrogastra (*Vigors*), *Hume, Nests and Eggs Ind. B.* p. 227 (1873).

Monticola erythrogastra (*Vigors*), *David et Oust. Ois. Chine,* p. 159 (1877).

In the *adult male in breeding-plumage* the general colour of the upper parts is cobalt-blue, each feather with concealed dark brown bases; lores, ear-coverts, and sides of the neck black; wings and wing-coverts dark brown, the margins of the outside webs dull blue, becoming cobalt-blue on the lesser wing-coverts; tail brown, suffused with dull blue and cobalt-blue; chin and throat black suffused with blue; the remainder of the underparts, including the axillaries and under wing-coverts, deep chestnut. Bill black. Wing with the third, fourth, fifth, and sixth primaries nearly equal and longest, second primary intermediate in length between the seventh and eighth, bastard primary 1·5 to 1·2 inch. Legs, feet, and claws dark brown. Length of wing 5·0 to 4·6 inches, tail 4·15 to 3·7, culmen 1·0 to 0·95, tarsus 1·1 to 1·0.

In the *adult female in breeding-plumage* the general colour of the upper parts, including the wings and tail, is dull olive-brown, transversely barred with black on the rump and upper tail-coverts; chin and a narrow line down the centre of the throat nearly uniform buff; the remainder of the underparts dark brown, each feather with a broad subterminal buffish-white transverse bar; axillaries and under wing-coverts pale ochraceous, barred with dark brown. It is not known that any change takes place *after the autumn moult*. *Birds of the year* differ from adults only in the male having pale ochraceous tips to the greater wing-coverts, and in the female having the barring of the rump extending more or less conspicuously over the back, scapulars, and wing-coverts. *Young in first plumage*

resemble the female on the underparts, and have all the small feathers of the upper parts somewhat similarly marked.

The Chestnut-bellied Rock-Thrush breeds in the Eastern Himalayas from Nepal to Assam, its range extending eastwards as far as Setchuen, in Western China. Nothing is known of its migrations.

a, *b*, *c*. ♂ ad.; *d*. ♂ juv. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
e, *f*. ♂ ♀ ad. sk.	Kumaon (*Strachey*).	India Museum.
g, *h*, *i*. ♂ ad., *k*. ♂ imm. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
l, *m*. Juv. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
n, *o*, *p*. ♀ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
q. ♂ ad.; *r*, *s*. ♀ imm. sk.	Nepal (*Hodgson*).	India Museum.
t. ♂ juv., *u*. ♂ ad. sk.	Darjiling (*Pearson*).	India Museum.
v. ♀ ad. sk.	Darjiling (*Eccles*).	F. Godman and O. Salvin, Esqrs. [P.].
w. ♀ ad. sk.	Bootan (*Pemberton*).	India Museum.
x. Skeleton.		Zoological Society.

9. Monticola gularis.

Monticola —— ?, *Swinhoe, Ibis*, 1861, p. 332.
Orocetes gularis, *Swinhoe, P. Z. S.* 1862, p. 318; *id. Ibis*, 1863, p. 93, pl. iii.; *id. P. Z. S.* 1863, p. 282.
Turdus gularis (*Swinhoe*), *Gray, Hand-l. B.* i. p. 261. no. 3810 (1869).
Petrophila gularis (*Swinhoe*), *Swinhoe, P. Z. S.* 1871, p. 368.
Orocetes gularis (*Swinhoe*), *Tacz. Journ. Orn.* 1875, p. 246; *Tacz. Bull. Soc. Zool. France*, 1876, p. 146.
Monticola gularis (*Swinhoe*), *David et Oust. Ois. Chine*, p. 161, pl. xlii. (1877).

In the *adult male in breeding-plumage* the head, nape, and lesser wing-coverts are cobalt-blue; lores chestnut-brown; ear-coverts, sides of neck, back, and scapulars nearly black; rump and upper tail-coverts chestnut; wings brown, the greater wing-coverts and innermost secondaries with pale margins, the base of the outer web of several of the secondaries white; tail-feathers brown, suffused slightly with blue on the outer webs; a narrowish band down the centre of the throat white; the rest of the underparts, including the axillaries and under wing-coverts, chestnut. Bill dark brown, pale at the base of the under mandible. Wing with the third and fourth primaries nearly equal and longest, second primary about equal to the fifth, bastard primary 0·95 to 0·8 inch. Legs, feet, and claws brown. Length of wing 3·93 to 3·83 inches, tail 2·95 to 2·8, culmen 0·83 to 0·74, tarsus 0·95.

The *female* very closely resembles the female of *M. cinclorhyncha*, but has the whole of the upper parts (except the head, wings, and tail) barred. *After the autumn moult* each cobalt-blue and black feather of the male has a pale dull chestnut margin which is cast in the spring; the chestnut feathers of the underparts have also paler margins. *Females after the autumn moult, birds of the year*, and *young in first plumage* are unknown.

The White-throated Rock-Thrush breeds in the valley of the

Ussuri in South-east Siberia and the mountain-ranges of North-east China, where it is a migratory bird. Its winter-quarters are unknown.

a. ♂ ad. sk. Ussuri river, lat. 48°, June 11, 1874 (*Dybowski*). Henry Seebohm, Esq. [P.].

10. Monticola rufocinerea.

Saxicola rufocinerea, *Rüpp. Neue Wirb. Vög.* p. 76, pl. xxvii. (1835); *id. Syst. Uebers.* p. 58 (1845); *Gray, Gen. B.* i. p. 179 (1846); *Heugl. Syst. Uebers.* p. 27 (1856); *Gray, Hand-l. B.* i. p. 225. no. 3221 (1869).
Petrocincla rufocinerea (*Rüpp.*), *Licht. Nomencl. Av.* p. 26 (1854).
Ruticilla rufocinerea (*Rüpp.*), *Brehm, Reis. Habesch.* p. 295 (1863).
Thamnolæa rufocinerea (*Rüpp.*), *Heugl. Journ. Orn.* 1869, p. 151; *id. Orn. N.O.-Afr.* i. p. 369 (1869).

In the *adult male in breeding-plumage* a narrow line at the base of the upper mandible and an indistinct eye-stripe are slate-grey; the remainder of the forehead and crown sooty brown, each feather with a dark shaft-line; nape, back, scapulars, and wings sooty brown; rump, upper tail-coverts, and tail chestnut, the basal three fourths of the two centre tail-feathers and a narrow terminal margin of the remainder brown. Chin, throat, and breast slate-grey; the rest of the underparts, including the axillaries and under wing-coverts, chestnut. Bill black. Wings with the third to the sixth primaries nearly equal and longest, second primary about equal to the eighth, bastard primary 1·1 to 0·9 inch. Legs, feet, and claws black. Length of wing 3·3 to 3·2 inches, tail 2·5 to 2·4, culmen 0·8 to 0·75, tarsus 1·0 to 0·95.

The *female* differs from the male in having the forehead, eye-stripe, chin, throat, and breast sooty brown like the back. *Birds of the year* and *young in first plumage* appear to be unknown.

This species is a connecting link between the genera *Monticola* and *Saxicola*, and is also very closely related to *Thamnobia*.

The Abyssinian Rock-Thrush appears to be confined to the highlands of northern Abyssinia, where it is said to be a resident.

a. ♂ ad. sk. Senafé, Feb. 25, 1868. W. T. Blanford, Esq. [C.].
b. ♀ ad. sk. Rararyguddy, Auseba valley, May 29, 1868. W. T. Blanford, Esq. [C.].

8. SIALIA.

	Type.
Sialia, *Swains. Zool. Journ.* iii. p. 173 (1827)	S. sialis.
Grandala, *Hodgs. J. A. S. Beng.* xii. p. 447 (1843).....	S. cœlicolor.

The genus *Sialia* consists of a small group of birds, apparently nearly allied to the Redstarts. The bill is short, slender, and black, and the rictal bristles nearly obsolete. The legs are black, and the tarsus unscutellated. The tail consists of twelve feathers, and is long and slightly forked. The wings are very long and pointed; the bastard primary is very small, and the second primary as long, or nearly so, as the third. The prevailing colours are blue, occasionally mixed with chestnut.

In habits the Bluebirds resemble to some extent the Redstarts, perching freely in trees, breeding in holes in trees, and laying blue eggs.

One species is peculiar to the Himalayan Region, whilst five are found on the American continent, three in the Nearctic Region, and two in the Neotropical.

Key to the Species.

A. Upper and under parts uniform deep indigo-blue, with metallic gloss on the rump and upper tail-coverts. (Subgeneric group GRANDALÆ.)
cœlicolor, p. 328.

B. Underparts dull verdigris-blue, or partly chestnut. (Subgeneric group SIALIÆ.)

a. Breast and flanks chestnut-brown.

a'. Chin and upper throat chestnut-brown.

a''. Length of tail 2·65 to 2·44 inches ..... *sialis*, p. 329.

b''. Length of tail 3·0 to 2·75 inches ..... *azurea*, p. 331.

b'. Chin and upper throat dull blue suffused with brown.

c''. Upper parts brilliant metallic indigo-blue, slightly suffused with brown on the upper back. Length of wing, males 4·6 to 4·4 inches, females 4·3 to 4·2 inches..... *mexicana*, p. 331.

d''. Upper parts brilliant metallic cobalt-blue, much suffused with brown on the upper back. Length of wing, males 4·2 to 4·0 inches, females 3·48 to 3·35 inches..... *occidentalis*, p. 332.

b. Breast and flanks dull verdigris-blue ..... *arctica*, p. 333.

1. Sialia cœlicolor.

Grandala cœlicolor, *Hodgs. J. A. S. Beng.* xii. p. 447 (1843); *Gray, Gen. B.* i. p. 184 (1846); *id. Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 69 (1846); *Blyth, J. A. S. Beng.* xvi. p. 132 (1847); *id. Cat. B. Mus. As. Soc.* p. 166 (1849); *Bp. Consp.* i. p. 298 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 281 (1854); *Gould, B. Asia*, pt. xiv. (1862); *Jerd. B. Ind.* ii. p. 119 (1863); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 35 (1863); *id. Hand-l. B.* i. p. 224. no. 3204 (1869); *Swinh. P. Z. S.* 1871, p. 360; *Prjev. Rowley's Orn. Misc.* ii. p. 182 (1877); *David et Oust. Ois. Chine*, p. 176 (1877).

Grandala schistacea, *Hodgs. J. A. S. Beng.* xii. letterpress on plate to illustrate page 447 (1843); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 281 (1854).

In the *adult male in breeding-plumage* the general colour of both upper and under parts is deep indigo-blue, shading into brilliant indigo-blue, with metallic gloss on the rump and upper tail-coverts; lores black; wing-coverts, quills, and tail-feathers black, obscurely margined on the outside web with greenish blue; axillaries and under wing-coverts dull black, margined with indigo-blue; inner margin of quills dull black. Bill black; rictal bristles nearly obsolete. Wings with the second and third primaries nearly equal and longest; bastard primary 0·65 to 0·4 inch. Legs, feet, and claws black. Length of wing 5·7 to 5·6 inches (females 5·4 to 5·2), tail 3·55 to 3·15, culmen 0·8 to 0·7, tarsus 1·15.

The *female* is an almost uniform earthy brown above and below, the feathers of the rump and upper tail-coverts alone being broadly tipped with dull brownish blue; the feathers of the head, nape, upper back, cheeks, chin, throat, breast, and flanks have greyish-white shaft-lines and tips, and the axillaries, under wing-coverts, and under tail-coverts have broad transverse greyish-white terminal bands; the secondaries and the adjoining five primaries have a broad white subbasal band or bar; inner margin of quills greyish white in the centre, shading into greyish brown towards the base and tip. *After the autumn moult* the blue is slightly obscured by duller margins of the feathers. *Birds of the year* and *young in first plumage* appear to be unknown in collections, but are described as somewhat resembling the females in their plumage. Some writers consider the so-called females to be young birds, and suppose that the adult female resembles the male.

The Himalayan Bluebird breeds at high elevations throughout the Himalayas, and eastwards throughout the mountains separating China from Thibet.

a. ♂ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *G. cœlicolor*, Hodgs.).
b, *c*. Juv. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *G. schistacea*, Hodgs.).
d, *e*. ♂ imm. sk.	Nepal.	B. H. Hodgson, Esq. [P.]
f, *g*. Juv. sk.	Nepal.	B. H. Hodgson, Esq. [P.].

2. Sialia sialis.

La Rouge-gorge bleue de la Caroline, *Briss. Orn.* iii. p. 423 (1760).
Motacilla sialis, *Linn. Syst. Nat.* i. p. 336 (1766).
Le Rouge-gorge bleu de l'Amérique sepentrionale, *Buff. Hist. Nat. Ois.* v. p. 212 (1778).
La Gorge-rouge de la Caroline, *Daubent. Pl. Enl.* no. 396 (1778).
Blue Warbler, *Lath. Gen. Syn.* ii. p. 446 (1783).
Motacilla scalis, *Gmel. Syst. Nat.* i. p. 989 (1788, probable misprint).
Sylvia sialis (*Linn.*), *Lath. Ind. Orn.* ii. p. 522 (1790); *Jard. ed. Wilson's Amer. Orn.* i. p. 55, pl. iii. fig. 3 (1832).
Œnanthe sialis (*Linn.*), *Vieill. N. Dict. d'Hist. Nat. Ois.* xxi. p. 417 (1818).
Saxicola sialis (*Linn.*), *Bonap. Ann. Lyc. N. York*, ii. p. 89 (1826).
Sialia wilsonii, *Swains. Zool. Journ.* iii. p. 173 (1827); *Bp. Comp. List B. Eur. & N. Amer.* p. 16 (1839); *Audub. B. Amer.* 8vo, ii. p. 171, pl. cxxxiv. (1839); *Gray, Gen. B.* i. p. 184 (1846); *Bp. Consp.* i. p. 238 (1850); *Cab. Mus. Hein.* i. p. 7 (1850); *Scl. Cat. Amer. B.* p. 10 (1862, *partim*); *Gray, Hand-l. B.* i. p. 229. no. 3312 (1869).
Ampelis sialis (*Linn.*), *Nuttall, Man. Orn.* i. p. 444 (1832).
Erythaca (Sialia) wilsonii (*Swains.*), *Sw. & Rich. Faun. Bor.-Amer. Birds*, p. 210 (1831).
Sialia sialis (*Linn.*), *Haldemann, Trego's Geogr. Pennsylv.* p. 77 (1843); *Baird, Cass. & Lawr. B. N. Amer.* p. 222 (1858); *Baird, Review*, p. 62 (1864); *Coues, Key N.-Amer. B.* p. 76 (1872); *Coues, B. N. West*, p. 13 (1874, *partim*); *Baird, Brewer, & Ridgw. Hist. N.-Amer. B.* i. p. 62 (1874); *Coues, Birds Colorado Vall.* p. 77 (1878, *partim*); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 45 (1879, *partim*).

Luscinia sialis (*Linn.*), *Giebel, Reich. Nat. Vög.* p. 44 (1860).
Scialia scialis (*Linn.*), *Le Moine, Ois. Canad.* p. 202 (1861).

In the *adult male in breeding-plumage* the general colour of the upper parts is brilliant metallic cobalt-blue; lores, ear-coverts, and cheeks dull brownish blue; wings, wing-coverts, and tail brilliant metallic cobalt-blue, broadly margined with brown on the inner webs. Chin, throat, breast, and flanks chestnut-brown with concealed blue bases, shading into white on the belly and under tail-coverts, the longest of the latter suffused with blue; axillaries and under wing-coverts pale bluish grey with white margins; inner margin of quills pale grey. Bill black. Wings with the second, third, and fourth primaries nearly equal and longest, bastard primary 0·7 to 0·45 inch. Legs, feet, and claws black. Length of wing 4·1 to 3·75 inches, tail 2·65 to 2·44, culmen 0·7 to 0·56, tarsus 0·85 to 0·8.

The *female* differs from the male in having the cobalt-blue without metallic gloss, much duller, and confined to the wings, upper tail-coverts, and tail, the rest of the upper parts, including the lores and the ear-coverts, being bluish grey suffused with brown; the underparts are much lighter and duller in colour, especially on the chin and upper throat, and the under tail-coverts, axillaries, and under wing-coverts are nearly white. *After the autumn moult* each feather on the upper parts of the male is obscurely tipped with brown, and the quill- and tail-feathers have narrow pale margins towards the tips, which are most conspicuous on the innermost secondaries. The feathers of the underparts look duller in consequence of becoming paler towards the tips. In the female the change is scarcely observable, except in the wings and tail, which resemble those of the male. The *male of the year* differs from the adult in having the outer web of the innermost secondaries broadly margined with chestnut-brown, and the chestnut-brown of the underparts is more chocolate. The *young in first plumage* resemble the *birds of the year* in the wings and tail, but have the whole of the small feathers of the upper parts a dull grey, those of the upper back and scapulars having pale shaft-lines, the wing-coverts having conspicuous white tips, and the feathers of the lower back having obscure dark transverse bars. The feathers of the throat, breast, and flanks have nearly white centres and brown margins.

The Eastern Bluebird breeds in the United States of America east of the Rocky Mountains, and in the same longitude in South Canada, migrating to the Southern States and Cuba during the severest part of winter. It is a resident bird in the Bermudas.

a. Ad. st.	North America.	Purchased.
b. Ad. st.	North America.	J. Gould, Esq. [P.].
c. Ad. st.	North America.	Purchased.
d. ♂ ad. sk.	North America.	Lord Odo Russell [P.].
e, *f*. Ad. sk.	Ann Arbor, Michigan.	Prof. J. B. Steere [P.].
g. Imm.; *h*, *i*. Juv. sk.	Toronto, Canada (*J. Whitely*).	R. B. Sharpe, Esq. [P.].
k, *l*. Skeleton.		Purchased.

3. Sialia azurea.

Sialia azurea, *Swains. Phil. Mag.* 1827, i. p. 369; *Baird, Review*, p. 62 (1864); *Sumichrast, Mem. Bost. Soc. N. H.* i. p. 544 (1869).
Sialia wilsoni, *Swains. apud Bp. Consp.* i. p. 298 (1850, *partim*); *apud Scl. Cat. Amer. B.* p. 10 (1862, *partim*); *apud Gray, Hand-l. B.* i. p. 220. no. 3312 (1869, *partim*); *apud Scl. & Salv. Nomencl. Av. Neotr.* p. 4 (1873).
Sialia sialis (*Linn.*), *apud Coues, B. N. West*, p. 13 (1874, *partim*); *apud Coues, Birds Colorado Vall.* p. 77 (1878, *partim*); *apud Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 45 (1879, *partim*).
Sialia sialis (*Linn.*), var. azurea, *Swains., Baird, Brewer, & Ridgw. Hist. N.-Amer. B.* i. p. 62 (1874).

This form does not appear to differ materially in colour from the preceding, and rests its claim to be considered a species solely upon the fact that it is a somewhat larger bird with a tail proportionately longer. The length of wing varies from 4·4 to 4·0 inches, and that of the tail from 2·95 to 2·75. In all other respects, and in the differences which are attributable to sex, age, and season, it does not appear to differ from the preceding. An examination of a larger series of these birds may prove that the difference between this and the preceding form is only subspecific.

The Long-tailed Eastern Bluebird breeds in the tablelands of South Mexico, Guatemala, and Honduras, where it is supposed to be resident.

a. ♂ ad. sk. Guatemala (*O. Salvin*). Henry Seebohm, Esq. [P.].

4. Sialia mexicana.

Sialia mexicana, *Swains. & Rich. Faun. Bor.-Amer., Birds*, p. 202 (1831); *Gray, Gen. B.* i. p. 184 (1846, *partim*); *Bp. Consp.* i. p. 298 (1850, *partim*); *Sclater, P. Z. S.* 1856, p. 293; *Baird, Cass. & Lawr. B. N. Amer.* p. 223 (1858, *partim*); *Scl. Cat. Amer. B.* p. 11 (1862, *partim*); *Gray, Hand-l. B.* i. p. 230. no. 3313 (1869, *partim*); *Scl. & Salv. Nomencl. Av. Neotr.* p. 4 (1873); *Coues, B. N. West*, p. 14 (1874, *partim*); *Baird, Brewer, & Ridgw. Hist. N.-Amer. B.* i. p. 65 (1874, *partim*); *Coues, Birds Colorado Vall.* p. 80 (1878, *partim*); *Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 47 (1879, *partim*).

In the *adult male in breeding-plumage* the general colour of the upper parts is brilliant metallic indigo-blue; lores, ear-coverts, cheeks, chin, and upper throat dull blue, more or less suffused with brown; the feathers of the upper back vary in individuals from chestnut-brown to blue, obscurely tipped with chestnut-brown; greater wing-coverts, innermost secondaries, and the tips of the remaining secondaries, the primaries, the primary-coverts, and the tail brown, the remaining portions of the wing and tail brilliant metallic indigo-blue; lower throat, breast, and flanks chestnut-brown, shading into grey, more or less suffused with blue on the belly; under tail-coverts, axillaries, and under wing-coverts pale blue, with still paler tips; inner margin of quills pale brown. Bill black. Wings with the second, third, and fourth primaries

nearly equal and longest, bastard primary 0·72 to 0·53 inch. Legs, feet, and claws black. Length of wing 4·6 to 4·4 inches (female 4·28), tail 2·85 to 2·6, culmen 0·65 to 0·6, tarsus 0·88 to 0·8.

The *female* differs from the male in having the head and back suffused with brown, the chin and throat greyish brown, the chestnut of the breast and flanks much duller in colour, the belly with very slight traces of blue, the axillaries and the under wing-coverts being also very slightly suffused with blue. *After the autumn moult* the feathers of the upper parts are obscurely tipped with brown; the quill- and tail-feathers have narrow pale margins towards the tips, and the outer webs of the innermost secondaries are blue. *Birds of the year* and *young in first plumage* appear to be unknown.

The Mexican Bluebird appears to be a resident in the highlands of Mexico.

a. Ad. sk. Mexico. Henry Seebohm, Esq. [P.].

5. Sialia occidentalis.

Sialia occidentalis, *Townsend, Journ. Phil. Acad. Nat. Sc.* vii. p. 188 (1837); *Audub. B. Amer.* 8vo, ii. p. 176, pl. cxxxv. (1839).

Sialia mexicana, *Swains. apud Bp. Comp. List B. Eur. & N. Amer.* p. 16 (1838); *apud Gray, Gen. B.* i. p. 184 (1846, *partim*); *apud Bp. Consp.* i. p. 298 (1850, *partim*); *apud Sclater, P. Z. S.* 1857, p. 126; *apud Baird, Cass. & Lawr. B. N. Amer.* p. 223 (1858, *partim*); *apud Scl. Cat. Amer. B.* p. 11 (1862, *partim*); *apud Baird, Review*, p. 63 (1864); *apud Gray, Hand-l. B.* i. p. 230. no. 3313 (1869, *partim*); *apud Cooper, B. Calif. ed. Baird*, p. 28 (1870); *apud Coues, Key N.-Amer. B.* p. 76 (1872); *apud Coues, B. N. West*, p. 14 (1874, *partim*); *apud Baird, Brewer, & Ridgw Hist. N.-Amer. B.* i. p. 65 (1874, *partim*); *apud Coues, Birds Colorado Vall.* p. 80 (1878, *partim*); *apud Salv. & Godm. Biol. Centr.-Amer. Zool., Aves*, i. p. 47 (1879, *partim*).

Sylvia occidentalis (*Towns.*), *Audub. Orn. Biogr.* v. p. 41, pl. cccxciii. fig. 4 (1839).

Sialia cæruleocollis, *Vigors, Zool. Voy. Blossom*, p. 18, pl. iii. (1839).

This form differs from the preceding in having the indigo-blue of the upper parts replaced by brilliant metallic cobalt-blue, and in having the brown on the upper parts much more developed, in some examples the upper back and scapulars showing little or no traces of blue. In other respects the two forms do not differ in colour, but this form appears to be always smaller in size. Length of wing 4·2 to 4·05 inches (females 3·48 to 3·35), tail 2·6 to 2·35, culmen 0·63 to 0·56, tarsus 0·88 to 0·8, bastard primary 0·65 to 0·5.

The *female* differs from that of the preceding in having the blue of the wings, rump, upper tail-coverts, and tail of the same cobalt-blue as the male, and in having the back much more suffused with brown. The changes which take place *after the autumnal moult* are the same as in the preceding form. *Birds of the year* appear to be unknown, but *young in first plumage* are scarcely distinguishable from those of *S. sialis*.

The Western Bluebird appears to be a resident in the mountains

of South British Columbia, the ranges on the Pacific coast as far south as California, and the Rocky Mountains as far south as the Colorado basin.

a, b. ♂, *c.* ♀ ad. sk.	West side of Rocky Mountains.	J. K. Lord, Esq.[P.].
d. Ad., *e, f.* Juv. sk.	Sumass Prairie, British Columbia.	J. K. Lord, Esq.[C.].
g. Juv. sk.	California.	Mr. Grueber [P.].
h. Ad. sk.	California.	Purchased.

6. Sialia arctica.

Erythaca (Sialia) arctica, *Sw. & Rich. Faun. Bor.-Amer., Birds*, p. 209 pl. xxxix. (1831).

Sialia arctica (*Swains.*), *Nuttall, Man. Orn.* ii. p. 573 (1834); *Bp. Comp. List B. Eur. & N. Amer.* p. 16 (1838); *Audub. B. Amer.* 8vo, ii. p. 178, pl. cxxxvi. (1839); *Gray, Gen. B.* i. p. 184 (1846); *Bp. Consp.* i. p. 298 (1850); *Baird, Cass. & Lawr. B. N. Amer.* p. 224 (1858); *Sel. Cat. Amer. B.* p. 11 (1862); *Baird, Review*, p. 64 (1864); *Gray, Hand-l. B.* i. p. 230. no. 3314 (1869); *Cooper, B. Calif. ed. Baird*, p. 29 (1870); *Coues, Key N.-Amer. B.* p. 76 (1872); *id. B. N. West*, p. 14 (1874); *Baird, Brewer, & Ridgw. Hist. N.-Amer. B.* i. p. 67 (1874); *Coues, Birds Colorado Vall.* p. 82 (1878).

Sylvia arctica (*Swains.*), *Audub. Orn. Biogr.* v. p. 38, pl. cccxciii. figs. 2, 3 (1839).

Sialia macroptera, *Baird, Expl. Surv. Vall. G. S. Lake, Utah*, pp. 314, 328 (1852).

Sialia arctica (*Swains.*), *Stevenson, U.S. Geol. Surv. Terr.* p. 403 (1871).

In the *adult male in breeding-plumage* the general colour of the upper parts is brilliant metallic azure-blue, greenish on the back, and with violet reflections on the wings and two centre tail-feathers; greater wing-coverts, innermost secondaries, and the tips of the remaining secondaries and primaries and of the tail-feathers brown; lores, ear-coverts, cheeks, chin, throat, breast, flanks, axillaries, and under wing-coverts dull verdigris-blue, shading into nearly white on the centre of the belly and under tail-coverts, the longest feathers of the latter being slightly suffused with blue; inner margin of quills pale bluish grey. Bill black. Wings with the second, third, and fourth primaries nearly equal and longest, bastard primary 0·7 to 0·55 inch. Legs, feet, and claws black. Length of wing 4·6 to 4·4 inches, tail 2·95 to 2·75, culmen 0·7 to 0·63, tarsus 0·9 to 0·85.

The *female* has the wings, rump, upper tail-coverts, and tail of the same colour as the male, but paler: the rest of the upper parts are greyish brown, very obscurely tipped with pale metallic verdigris-brown. The underparts are pale greyish brown, shading into nearly white on the centre of the belly, under tail-coverts, and under wing-coverts, and slightly suffused with verdigris-blue on the axillaries only. *After the autumn moult* the feathers of the upper parts have very obscure brown fringes, and the outer webs of the greater wing-coverts and innermost secondaries are blue, whilst all

the quill- and tail-feathers are narrowly margined with white towards the tips. *Birds of the year* have brownish margins to the innermost secondaries. *Young in first plumage* have pale tips to the wing-coverts, pale shaft-lines to the feathers of the upper back, and pale centres and brown margins to the feathers of the throat and breast.

The Rocky-Mountain Bluebird breeds throughout the Rocky Mountains, and winters in California and the North-western United States.

a. ♂ ad. st.	Arctic America.	Sir G. Back [P.].
b, *c*. ♀; *d*, *e*. ♂ ad. sk.	West side of Rocky Mountains.	J. K. Lord, Esq. [P.].
f. Ad. sk.	N.W. America.	

9. RUTICILLA.

Type.

Ruticilla, *C. L. Brehm, Isis*, 1828, p. 1280 ..... R. phœnicurus.
Phœnicura, *Swains. Faun. Bor.-Am.* ii. p. 489 (1831) R. phœnicurus.
Adelura, *Bp. Compt. Rend.* xxxviii. p. 8 (1854) .. R. cæruleocephala.

The genus *Ruticilla* comprises a group of thirteen species very nearly allied to the Robins. The bill is always short, slender, and black, and the rictal bristles fairly developed; the legs are always black, or nearly so, and the tarsus unscutellated; the tail consists of twelve feathers, and is long and nearly even. Most of the species have the rump and the tail-feathers, except the two centre ones, chestnut. One species has the pattern of the tail Saxicoline, but it may at once be distinguished from the chestnut-tailed Chats by the tail being about five times the length of the culmen. In two other species there is little or no chestnut on the tail; but they may be distinguished from the black or brown-tailed Robins by the black on the throat, and the white on the wing-coverts and innermost secondaries. All the male adult Redstarts, except one species, have black or very dark-blue throats. The Redstarts are fair songsters, perch freely in trees, but generally build in holes of walls, rocks, and tree-trunks. Two species breed throughout temperate Europe, one of which just enters Persia, and the other penetrates as far east as Central Siberia. On the eastern shores of the Mediterranean three other species appear, two of which probably only just enter Persia, whilst the third enters Turkestan. In the Caucasus a sixth species begins, and continues eastwards through Turkestan and the Himalayas, to the borders of China. Two more species appear in Turkestan, one of which extends eastwards to the Himalayas, and the other to South-east Siberia. Four additional species appear in the Himalayas, extending eastwards to West China; whilst the last species is first met with near Lake Baical, and extends to Japan and North China. The genus may be said to be pretty evenly distributed throughout the temperate Palæarctic Region and the highlands of the Himalayas, the number of species being greatest in the latter district.

Key to the Species.

(Males.)

a. Tail black, or with each feather, except the two centre ones, chestnut tipped with black.
  a'. A large patch of white on the wing.
    a''. Breast, belly, and under tail-coverts chestnut ..... *schisticeps*, p. 351.
    b''. Breast black; belly and under tail-coverts white ..... *cæruleocephala*, p. 353.
  b'. No patch of white on the wing ..... *frontalis*, p. 349.
b. Tail-feathers, except sometimes the two central ones, uniform chestnut.
  c'. Axillaries chestnut.
    c''. Chin and throat black.
      a'''. A more or less distinct white patch on the wing.
        a^4. Back black.
          a^5. Length of wing 2·95 to 2·8 inches *aurorea*, p. 345.
          b^5. Length of wing 4·3 to 4·05 inches *erythrogastra*, p. 347.
        b^4. Back slate-grey.
          c^5. Forehead white. Tail 2·45 to 2·2 inches. Second primary between the fifth and seventh ..... *mesoleuca*, p. 338.
          d^5. Forehead grey. Tail 2·85 to 2·6 inches. Second primary between the eighth and ninth ..... *hodgsoni*, p. 344.
      b'''. No white on the wing.
        c^4. Back black; belly chestnut.
          e^5. Under wing-coverts chestnut; wing 3·5 to 3·0 inches ..... *rufiventris*, p. 342.
          f^5. Under wing-coverts chestnut and black; wing 3·1 to 2·9 inches .. *semirufa*, p. 344.
        d^4. Back grey; centre of belly nearly white ..... *phœnicurus*, p. 336.
    d''. Chin and throat chestnut ..... *erythronota*, p. 348.
  d'. Axillaries black.
    e''. Centre of belly nearly white, shading into grey on the flanks ..... *titys*, p. 339.
    f''. Lower belly uniform chestnut ..... *erythropygia*, p. 341.

(Females.)

a. Tail dark brown; or chestnut, with each feather except the two centre ones, more or less broadly tipped with black.
  a'. Tail, except the two centre feathers, with the basal two thirds chestnut ..... *frontalis*, p. 349.
  b'. Tail with the terminal two thirds or more dark brown.
    a''. Base of outer tail-feathers chestnut; greater wing-coverts white ..... *schisticeps*, p. 351.
    b''. Tail-feathers uniform dark brown; greater wing-coverts brown with pale tips .... *cæruleocephala*, p. 353.
b. Tail-feathers, except sometimes the two central ones, uniform chestnut.
  c'. Base of secondaries white ..... *aurorea*, p. 345.

d'. Base of secondaries brown.
c''. Breast, flanks, and belly chestnut.
a'''. Length of wing 3·35 to 3·1 inches .. *rufiventris*, p. 342. *erythroprocta*, p. 341.
b'''. Length of wing 3·06 to 2·62 inches .. *semirufa*, p. 344.
d''. Breast, flanks, and belly varying from pale brown to grey.
c'''. Size large; wing 4 inches or more .. *erythrogastra*, p. 347.
d'''. Size smaller; wing 3·4 inches or less.
a^4. Underparts nearly the same sooty brown as the upper parts ..... *tityus*, p. 339.
b^4. Underparts, especially the belly, paler than the upper parts.
a^5. Second primary between the fifth and seventh.
a^6. Breast shaded with chestnut and white..... *phœnicurus*, p. 336.
b^6. Breast shaded with grey and brown ..... *mesoleuca*, p. 338.
b^5. Second primary between the seventh and ninth.
c^6. Wing-coverts and secondaries margined with dull white .... *erythronota*, p. 348.
d^6. Wing-coverts and secondaries margined with buffish brown.. *hodgsoni*, p. 344.

1. Ruticilla phœnicurus.

Le Rossignol de muraille cendré, *Briss. Orn.* iii. p. 406 (1760).
Le Rouge-queue à collier, *Briss. Orn.* iii. p. 411 (1760).
Le Rossignol de muraille, *Briss. Orn.* iii. p. 403 (1766); *Buff. Hist. Nat. Ois.* v. p. 170 (1778); *Daubent. Pl. Enl.* no. 351 (1778).
Motacilla phœnicurus, *Linn. Syst. Nat.* i. p. 335 (1766); *Gmel. Syst. Nat.* p. 987 (1788); *Bechst. Naturg. Deutschl.* iv. p. 609 (1795).
Redstart, *Lath. Gen. Syn.* ii. p. 421 (1783).
Sylvia phœnicurus (*Linn.*), *Lath. Gen. Syn. Suppl.* i. p. 287 (1787); *Lath. Ind. Orn.* ii. p. 511 (1790); *Bechst. Orn. Taschenb.* i. p. 181 (1802); *Wolf, Taschenb.* i. p. 244 (1810); *Temm. Man. d'Orn.* p. 119 (1815); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 267 (1817); *Temm. Man. d'Orn.* i. p. 220 (1820); *Ménétr. Cat. Rais. Cauc.* p. 35 (1832, *partim*); *Nordm. Démid. Voy. Russ. mérid.* iii. p. 135 (1840); *Werner, Atlas, Insectiv.* pl. 52 (1842).
Saxicola phœnicurus (*Linn.*), *Koch, Syst. baier. Zool.* i. p. 188 (1816).
Ficedula phœnicurus (*Linn.*), *Boie, Isis*, 1822, p. 553; *Heugl. Syst. Uebers.* p. 25 (1856).
Ruticilla sylvestris, *Brehm, Vög. Deutschl.* p. 363 (1831)*.
Ruticilla arborea, *Brehm, Vög. Deutschl.* p. 363 (1831)*.
Ruticilla hortensis, *Brehm, Vög. Deutschl.* p. 364 (1831)*.
Phœnicura muraria, *Swains. & Rich. Faun. Bor.-Am.* ii. p. 489 (1831).
Ficedula ruticilla, *Eyton, Cat. Brit. B.* p. 10 (1836).
Phœnicura ruticilla (*Eyton*), *Gould, B. Eur.* ii. pl. 95 (1837); *Swains. Classif. B.* ii. p. 240 (1837).
Ruticilla phœnicura (*Linn.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 15 (1838); *Rüpp. Syst. Uebers.* p. 57 (1845); *Gray, Gen. B.*

* These names are quoted in the 'Isis' for 1828, p. 1280; consequently they must have been published earlier than 1831. The exact date of such useless synonyms can be of no importance save to the ornithological pedant.

i. p. 180 (1846); *Bp. Consp.* i. p. 296 (1850); *Cab. Mus. Hein.* i. p. 2 (1850); *Moore, P. Z. S.* 1854, p. 25; *Hartl. Orn. W.-Afr.* p. 68 (1857); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 230 (1859); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Jerd. B. Ind.* ii. p. 136 (1863); *Filippi, Viagg. Pers.* p. 347 (1865); *Degl. et Gerbe, Orn. Eur.* i. p. 438 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 215 (1867); *Gould, B. Gt. Br.* ii. pl. li. (1869); *Gray, Hand-l. B.* i. p. 221. no. 3153 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 333 (1869); *Doderl. Avif. Sicil.* p. 115 (1869); *Droste, Vogelw. Borkum*, p. 94 (1869); *Harting, Handb. Br. B.* p. 12 (1872); *Shelley, B. Egypt*, p. 82 (1872); *Newt. ed. Yarr. Br. B.* i. p. 329 (1873); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Dresser, B. Eur.* pt. xxvi. (1874); *Irby, B. Gibr.* p. 81 (1875); *Dresser, Ibis*, 1876, p. 77; *Blanf. East. Pers.* ii. p. 163 (1876); *Tacz. Bull. Soc. Zool. France*, i. p. 143 (1876); *Bogd. B. Cauc.* p. 95 (1879); *Seebohm, Ibis*, 1880, p. 191.

Lusciola phœnicurus (*Linn.*), *Keys. u. Blas. Wirb. Eur.* pp. lviii, 191 (1840); *Schl. Rev. Crit.* p. xxxi (1844); *Linderm. Vög. Griechenl.* p. 105 (1860).

Erithacus phœnicurus (*Linn.*), *Degl. Orn. Eur.* i. p. 502 (1849).

Luscinia phœnicurus (*Linn.*), *Sundev. Sv. Fogl.* p. 59 (1856).

Sylvia (Ruticilla) phœnicura (*Linn.*), *Radde, Reis. Sibir. Vög.* p. 254 (1863).

Lusciola (Ruticilla) phœnicura (*Linn.*), *Fritsch, Vög. Eur.* p. 186 (1870).

In the *male in full autumn plumage* the general colour of the upper parts is brown, the concealed white bases of the feathers on the forehead showing conspicuously when disturbed, and slate-grey making itself seen on the back under similar circumstances; rump and upper tail-coverts rich chestnut: wings and wing-coverts dark brown, with pale chestnut-brown margins on the outer webs of each feather, broadest on the innermost secondaries; tail chestnut, except the inner webs of the two central tail-feathers, which are dark brown. A narrow band at the base of the upper mandible, the lores, cheeks, ear-coverts, chin, and throat are black, each feather narrowly margined with pale brownish chestnut: the breast and flanks are chestnut, each feather broadly margined with white, shading into nearly pure white on the centre of the belly, and into pale chestnut on the axillaries, under wing- and tail-coverts; inner margin of quills pale brown. Bill, legs, feet, and claws black. Wings with the third, fourth, and fifth primaries nearly equal and longest; second primary about equal to the sixth, frequently slightly shorter, and occasionally slightly longer; bastard primary 0·9 to 0·75 inch. Length of wing 3·3 to 2·8 inches, tail 2·5 to 2·1, culmen 0·58 to 0·5, tarsus 0·9 to 0·75.

The *female* resembles the male in the colour of the upper parts, except that there are no black, white, or slate-grey bases to the feathers to become visible when the plumage is ruffled. The under-parts are buff, darkest on the breast, axillaries, and under tail-coverts. In *breeding-plumage* the forehead of the male has become pure white, all trace of brown has disappeared from the head and back, leaving them slate-grey, and the pale margins of the wing-coverts, quills, and innermost secondaries are scarcely perceptible; the narrow band at the base of the upper mandible, the lores, cheeks, ear-coverts, and throat have become a velvet-black, and the feathers

of the breast and flanks have cast their white margins, and have, in company with the axillaries, wing-coverts, and under tail-coverts, deepened in colour to a rich chestnut. The *female* has little or no seasonal change. *Birds of the year* differ from adults only in having the black parts broadly, instead of narrowly, margined with pale brownish chestnut. *Young in first plumage* resemble the female, but have each feather of the upper and under parts, except the quills and tail-feathers, with pale centres and dark margins.

The European Redstart breeds throughout the Palæarctic Region as far north as the Arctic Circle and as far east as the watershed of the Yenesay and the Lena, in the southern districts, at some elevation, preferring the pine-region. It winters in South Persia and Central Africa as far west as Senegal.

a, *b*. ♂ ad. st.	England.	J. Gould, Esq.
c. ♂ imm.; *d*. Juv. st.	England.	
e. ♂ ad. st.	Epping Forest.	H. Doubleday, Esq. [P.].
f–*k*. Juv. st.	Saffron Walden, Essex.	J. Clark, Esq.
l. ♂ ad. sk.	Cambridgeshire, May 22, 1866 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
m. Juv. sk.	Surbiton, Surrey, August 1877.	Mr. Mott [P.].
n. ♀ ad. st.	Devonshire.	Colonel Montagu [P.].
o. ♂ juv.; *p*. ♀ ad. sk.	Skåne, Sweden, August 1871 (*J. Meves*).	R. B. Sharpe, Esq. [P.].
q. ♀ juv. sk.	Skåne, Sweden, Sept. 12, 1871 (*J. Meves*).	R. B. Sharpe, Esq. [P.].
r, *s*. ♂ ♀ ad. sk.	S. Norway, June 1860 (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
t. Juv. sk.	S. Norway, May 1866 (*F. Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
u, *v*. ♂; *w*. ♀ ad. sk.	Heligoland, Sept. 1876.	Henry Seebohm, Esq. [P.].
x. ♂ ad. sk.	Belgium.	Brussels Museum [P.].
y. ♂ ad. sk.	Valencia, S. Spain, March 25, 1872 (*H. Saunders*).	Henry Seebohm, Esq. [P.].
z, *a'*. ♂ ♀ ad. sk.	Valencia, S. Spain, April 1872.	Howard Saunders, Esq. [P.].
b'. ♀ ad. sk.	El Djem, Tunis, March 1, 1857 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
c'. ♂ ad. sk.	M'tesa's country.	Sig. Piaggia [C.].
d'. ♂ ad. st.; *e'*, *f'*. ♂ ♀ ad. sk.	Egypt (*Dr. Christie*).	G. Turnbull, Esq. [P.].
g'. ♀ ad. sk.	Syria.	Dr. Staudinger.
h'. ♀ ad. sk.	Mount Carmel.	Canon Tristram [C.].
i', *k'*. ♂ ♀ ad. sk.	Taurus, Asia Minor, April 1876 (*C. G. Danford*).	Henry Seebohm, Esq. [P.].
l'. ♂ ad. sk.	Saharunpore (*Dr. Jameson*) [?].	India Museum.
m', *n'*. Skeleton.	England.	Purchased.
o'. Skull.	Würtemberg.	Dr. A. Günther.

2. Ruticilla mesoleuca.

Sylvia mesoleuca, *Hempr. et Ehr. Symb. Phys.* fol. cc (1832).
Sylvia phœnicura (*Linn.*), *apud Ménétr. Cat. Rais. Casc.* p. 35 (1832, *partim*).

Ruticilla bonapartii, *Von Müll. Beitr. Orn. Afr.* pl. xiv. (1853).
Ruticilla mesoleuca (*Hempr. et Ehr.*), *Cab. Journ. Orn.* 1854, p. 446; *Hart. Orn. W.-Afr.* p. 68 (1857); *Heugl. Orn. N.O.-Afr.* i. p. 333 (1869); *Gray, Hand-l. B.* i. p. 221. no. 3157 (1869); *Dresser, B. Eur.* pt. liv. (1876); *Sclater & Taylor, Ibis*, 1876, p. 64; *Danford, Ibis*, 1878, p. 14; *Seebohm, P. Z. S.* 1878, p. 979; *Bogd. B. Cauc.* p. 95 (1879).
Ruticilla marginella, *Bonap. Compt. Rend.* xxxviii. p. 8 (1854).
Ruticilla phœnicura (*Linn.*), *apud Heugl. Syst. Uebers.* p. 25 (1856); *apud Blanf. Geol. & Zool. Abyss.* p. 358 (1870).
Ruticilla pectoralis, *Heugl. Journ. Orn.* 1863, p. 165.
Ruticilla mesomela, *Hempr. et Ehr., fide Loche, Expl. Sci. Algér., Ois.* i. p. 217 (1867).

This species is very closely allied to *R. phœnicura*. The *male* differs from the Western bird in having the outside webs of the secondaries more or less broadly margined with white. The *female* resembles that of the nearly allied species, but is slightly darker on both the upper and under parts, and is intermediate between it and the female of *R. tithys*. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 0·86 to 0·6 inch. Length of wing 3·2 to 2·84 inches, tail 2·45 to 2·16, culmen 0·54 to 0·5, tarsus 0·9 to 0·75.

The *seasonal* changes resemble those of the preceding plumage. *Young in first plumage* are somewhat darker in the colour both of the upper and under parts than is the case in the nearly allied species.

Ehrenberg's Redstart breeds in the Caucasus, Asia Minor, and Algiers, and winters in Western Arabia, Abyssinia, and Senegal.

a. ♂ ad. sk.	Giaour Keuy, April 22, 1876 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
b. ♂ ad. sk.	Ephesus, Asia Minor.	H. J. Elwes, Esq. [P.].
c, d. ♂ ♀ ad. sk.	Mount Carmel.	Canon Tristram [C.].
e. ♂ ad. sk.	Senafé, 7500 ft., Feb. 26, 1868.	W. T. Blanford, Esq. [C.].
f. ♂ ad. sk.	Senegambia.	M. Verreaux.

3. Ruticilla tithys.

The Grey Redstart, *Edwards, Nat. Hist. B.* p. 29, pl. xxix. (1741).
Le Rossignol de muraille de Gibraltar, *Briss. Orn.* iii. p. 407 (1760).
Le Rouge-queue, *Briss. Orn.* iii. p. 409 (1760); *Buff. Hist. Nat. Ois.* v. p. 180 (1778).
Motacilla phœnicurus, β. titys, *Linn. Syst. Nat.* i. p. 335 (1766).
Sylvia tithys, *Scop. Ann.* i. p. 157 (1769); *Lath. Ind. Orn.* ii. p. 512 (1790); *Beckst. Orn. Taschenb.* i. p. 179 (1802); *Wolf. Taschenb.* i. p. 241 (1810); *Temm. Man. d'Orn.* p. 117 (1815); *Vieill. N. Dict. d'Hist. Nat.* xi. p. 269 (1817); *Temm. Man. d'Orn.* i. p. 218 (1820); *Ménétr. Cat. Rais. Cauc.* p. 35 (1832); *Nordm. Démid. Voy. Russ. mérid.* iii. p. 134 (1840).
Motacilla ochrura, *F. G. Gmelin, Reis. Russl.* iii. p. 101, pl. xix. fig. 3 (1774); *Gmel. Syst. Nat.* i. p. 978 (1788, *ex F. G. Gmelin*).
Le Rouge-queue gris, *Buff. Hist. Nat. Ois.* v. p. 177 (1778).
Redtail, *Lath. Gen. Syn.* ii. p. 425 (1783, ♀).

Black Redtail, *Lath. Gen. Syn.* ii. p. 426 (1783, ♂).
Motacilla gibraltariensis, *Gmel. Syst. Nat.* i. p. 987 (1788, *ex Edwards*); *Lath. Ind. Orn.* ii. p. 513 (1790).
Motacilla atrata, *Gmel. Syst. Nat.* i. p. 988 (1788, *ex Lath.*).
Motacilla erithacus, *Linn. apud Gmel. Syst. Nat.* i. p. 988 (1788), *apud Bechst. Naturg. Deutschl.* iv. p. 601 (1795).
Sylvia erithacus (*Linn.*), *apud Lath. Ind. Orn.* ii. p. 513 (1790).
Sylvia tythis (*Scop.*), *Bechst. Orn. Taschenb.* i. p. 179 (1802).
Motacilla erythrourus, *Rafin. Caratt.* p. 6 (1810).
Saxicola tithys (*Scop.*), *Koch, Syst. baier. Zool.* i. p. 186 (1816).
Ruticilla atra, *Brehm, Vög. Deutschl.* p. 365 (1831)*.
Ruticilla titys (*Scop.*), *Brehm, Vög. Deutschl.* p. 365 (1831)*; *Heugl. Orn. N.O.-Afr.* i. p. 334 (1869); *Newt. ed. Yarr. Br. B.* i. p. 333 (1873); *Dresser, B. Eur.* pt. xxix. (1874); *Irby, B. Gibr.* p. 82 (1875); *Blanf. East. Pers.* ii. p. 166 (1876).
Ruticilla atrata (*Gmel.*), *Brehm, Vög. Deutschl.* p. 366 (1831)*.
Ruticilla gibraltariensis (*Gmel.*), *Brehm, Vög. Deutschl.* p. 366 (1831)*.
Sylvia tites (*Scop.*), β. campylonyx, *Hempr. et Ehr. Symb. Phys.* fol. dd (1833).
Phœnicura tithys (*Scop.*), *Gould, B. Eur.* ii. pl. 96 (1837); *Jard. & Selby, Ill. Orn.* pl. 86. figs. 1 & 2 (1839).
Lusciola thitys (*Scop.*), *Keys. u. Blas. Wirb. Eur.* pp. lix, 191 (1840).
Sylvia thitys (*Scop.*), *Werner, Atlas, Insectiv.* pl. ii. (1842).
Lusciola thitys (*Scop.*), *Schl. Rev. Crit.* p. xxxi (1844).
Ruticilla thitis (*Scop.*), *Rüpp. Syst. Uebers.* p. 57 (1845).
Ruticilla tithys (*Scop.*), *Gray, Gen. B.* i. p. 180 (1846); *Bp. Consp.* i. p. 296 (1850); *Cab. Mus. Hein.* i. p. 2 (1850); *Moore, P. Z. S.* 1854, p. 25; *Heugl. Syst. Uebers.* p. 25 (1856); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 231 (1859); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Gould, B. Gt. Br.* ii. pl. 52 (1863); *Newton, Baring-Gould's Iceland*, p. 409 (1863); *Degl. et Gerbe, Orn. Eur.* i. p. 440 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 217 (1867); *Gray, Hand-l. B.* i. p. 221. no. 3154 (1869); *Doderl. Avif. Sicil.* p. 115 (1869); *Harting, Handb. Br. B.* p. 13 (1872); *Shelley, B. Egypt*, p. 83 (1872).
Ruticilla cairii, *Gerbe, Dict. Univ. d'Hist. Nat.* xi. p. 259 (1848).
Erithacus tithys (*Scop.*), *Degl. Orn. Eur.* i. p. 504 (1849).
Erithacus cairii (*Gerbe*), *Degl. Orn. Eur.* i. p. 507 (1849).
Lusciola tithys (*Scop.*), *Schl. Vog. Nederl.* p. 156 (1854).
Ruticilla montana, *Brehm, Naum.* 1855, p. 281.
Lusciola (Ruticilla) erythaca (*Linn.*), *apud Fritsch, Vög. Eur.* p. 187 (1870).
Ruticilla ochruros (*Gmel.*), *Bogd. B. Cauc.* p. 96 (1879).
Ruticilla thytis (*Scop.*), *Finsch, Verh. zool.-bot. Gesellsch. Wien*, p. 162 (1879).

In the *adult male in full autumn plumage* the general colour of the upper parts is slate-grey; a narrow line at the base of the upper mandible, the lores, and chin are black; quills brown, the outside webs of the secondaries narrowly margined with white; wing-coverts and innermost secondaries slate-grey; rump, upper and under tail-coverts, and tail bright chestnut, except the two centre tail-feathers, which are brown; throat, breast, axillaries, and under wing-coverts black, each feather more or less obscurely margined with buffish brown, which is the colour of the belly and

* See footnote, p. 336, which applies equally to these names.

flanks; inner margin of quills pale brown. Bill, legs, feet, and claws black. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 0·9 to 0·8 inch. Length of wing 3·5 to 3·3 inches (females 3·3 to 3·2), tail 2·65 to 2·45, culmen 0·57 to 0·54, tarsus 1·0 to 0·9.

In the *female in full autumn plumage* the upper and under tail-coverts and the tail are similar in colour to those of the male; the rest of the plumage is sooty brown, paler on the margins of the outside webs of the wing-coverts and innermost secondaries, and on the centre of the belly. In the *male in spring* the buffish-brown margins to the feathers on the throat, breast, axillaries, and under wing-coverts are cast, leaving them black; the black band at the base of the upper mandible has become broader, the head and lower back has become a darker slate-grey, and the upper back, scapulars, and wing-coverts nearly black; the white on the wing has also become less conspicuous. The *female* has become slightly darker, and the pale edges to the wing-feathers have nearly disappeared. It is not known that *birds of the year* differ from adults. *Young in first plumage* have most of the feathers of the upper and under parts barred at the tips with black.

The Black Redstart breeds in Central and Southern Europe, its range extending eastwards as far as West Persia. It is a rare visitor to the British Islands and South Norway and Sweden, and is recorded as having strayed as far north as Iceland. In South Europe it is a partial resident, and has been said to breed in Algeria. It winters in Nubia.

a, *b*. ♂; *c*. ♀ imm. st.	Europe.	Purchased.
d. ♂ ad. sk.	Europe.	Purchased.
e. ♂ ad. st.	Wimbledon Common.	Mr. J. Baker [C.].
f. ♀ ad. st.	Brighton.	F. Bond, Esq. [P.].
g, *h*. ♂ imm. sk.	France.	M. Parzudaki.
i. ♂ ad. sk.	La Tour, Canton Fribourg, April 8, 1876 (*L. Olph-Galliard*).	R. B. Sharpe, Esq. [P.].
k. ♀ ad. sk.	Ariana, Tunis, Feb. 21, 1857 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
l. ♂ ad. sk.	Algeria.	F. Godman and O. Salvin, Esqrs. [P.].
m. ♀ ad. sk.	Nubia.	Dr. Leith Adams [P.].
n. ♂ ad. sk.	Shiloh.	Canon Tristram [C.].
o. ♀ ad. sk.	Gadara.	Canon Tristram [C.].
p. ♀ ad. sk.	Smyrna, Nov. 11, 1872 (*Dr. Krüper*).	Baron A. von Hügel [P.].

q, *r*, *s*, *u*

4. Ruticilla erythroprocta.

Ruticilla erythroprocta, *Gould*, *P. Z. S.* 1855, p. 78; *id. B. Asia*, pt. viii. pl. 16 (1856).

x, *y*, *z*. his species is intermediate between *R. tithys* and *R. rufiventris*, ng the white edges to the secondaries, the nearly black axilla-

ries and under wing-coverts, and the black breast and upper belly of the former, and the chestnut lower belly of the latter. The forehead is black and the crown pale grey, shading into black on the nape. Length of wing 3·3 inches, tail 2·5, culmen 0·55, tarsus 0·88.

The *female* is not distinguishable from that of *R. rufiventris*.

Nothing is apparently known of this species beyond the types in the Museum from Asia Minor. I suspect that the female is a specimen of *R. rufiventris*, and the male a hybrid between that bird and *R. tithys*.

a, *b*. ♂ ♀ ad. sk.	Erzeroum, Asia Minor (*Dickson & Ross*).	J. Gould, Esq. (Types of *Ruticilla erythroprocta*, Gould.)

5. Ruticilla rufiventris.

? Le Traquet à cul roux, *Levaill. Ois. d'Afr.* iv. p. 113, pl. 118. fig. 1 (1805, *said to be from Caffre-Land*).

? Œnanthe rufiventris, *Vieill. N. Dict. d'Hist. Nat.* xxi. p. 431 (1818, *ex Levaill.*).

Phœnicura atrata (*Gmel.*), *apud Jard. & Selby, Ill. Orn.* pl. 86. fig. 3 (1829); *Jerd. Madr. Journ.* x. p. 267 (1839).

Phœnicura nipalensis, *Hodgson, MS. Drawings* (*in the Brit. Mus.*) *of B. of Nepal*, pl. lxxv. fig. 2. no. 404, pl. lxxviii. fig. 7. no. 404, *undè*

Phœnicura nipalensis *vel* atrata, *Hodgson, Gray's Zool. Misc.* p. 83 (1844, *descr. null.*).

Ruticilla atrata (*Gmel.*), *apud Gray, Cat Mamm. &c. Nepal Coll. Hodgs.* p. 68 (1846); *apud Gray, Gen. B.* i. p. 180 (1846); *apud Licht. Nomencl. Av.* p. 28 (1854).

Ruticilla phœnicurus (*Linn.*), *apud Blyth, Cat. B. Mus. As. Soc.* p. 168 (1849).

Ruticilla indica, *Blyth, Cat. B. Mus. As. Soc.* p. 168 (1849); *Bp. Consp.* i. p. 296 (1850).

Ruticilla phœnicuroides, *Moore, P. Z. S.* 1854, p. 25, pl. lvii.; *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 301 (1854); *Jerdon, B. Ind.* ii. p. 136 (1863); *Gray, Hand-l. B.* i. p. 221. no. 3172 (1869).

Ruticilla nipalensis, *Moore, P. Z. S.* 1854, p. 26; *Horsf. & Moore, Cat. B. Mus. E.I. Comp.* i. p. 302 (1854); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 33 (1863).

Ruticilla rufiventris, *Jerdon, B. Ind.* ii. p. 137 (1863); *Gray, Hand-l. B.* i. p. 221. no. 3161 (1869); *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 106 (1870); *Swinh. P. Z. S.* 1871, p. 358; *Blanf. East. Pers.* ii. p. 163 (1876); *Prjev. Rowley's Orn. Misc.* ii. p. 174 (1877); *David et Oust. Ois. Chine*, p. 169 (1877); *Dresser, B. Eur.* pt. lxvii. (1878, *partim*).

Ruticilla erythroprocta, *Gould, apud Hume & Henders. Lahore to Yark.* p. 208 (1873), *apud Severtz. Turkest. Jevotn.* p. 65 (1873).

Ruticilla semirufa (*Hempr. et Ehr.*), *apud Dresser, Ibis*, 1877, p. 77.

This species is distinct from, though very nearly allied to, *R. phœnicura*. In its *spring plumage* it differs in having the black at the base of the upper mandible slightly more developed, and the white on the forehead rather less conspicuous; the colour of the mantle and the wing-coverts is much darker, approaching b

the black on the throat extends over the upper breast, and the rest of the underparts are a uniform chestnut, richer in colour than in the Western species, and not becoming paler on the centre of the belly and under tail-coverts. In other respects there appears to be little or no difference in the colour of the two species. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 1·0 to 0·75 inch. Length of wing 3·6 to 3·2 inches (females 3·36 to 3·31), tail 2·6 to 2·4, culmen 0·61 to 0·54, tarsus 1·0 to 0·9.

The *female* is considerably darker, both on the upper and under parts, than that of its near ally, and the under tail-coverts are more rufous. In *full autumn plumage* the difference between the two species is less striking, as in both of them the white and black feathers are tipped with brown.

This species is subject to considerable variations. Extreme forms have the entire head, neck, breast, back, scapulars, and wing-coverts jet-black. The black on the upper breast also sometimes extends so far down as to cover the entire breast; but it is never so much developed as in *R. erythroprocta*, and the axillaries are never black as in that species.

Males of the year have the upper parts coloured as in the female, and the black on the throat partially concealed by the brown tips to the feathers. *Females of the year* have broad pale edges to the wing-coverts and innermost secondaries, and have the underparts much browner. *Young in first plumage* appear to be unknown.

The Indian Redstart breeds in North China, Mongolia, and Eastern Turkestan, wintering in India, Scinde, Baluchistan, and South-east Persia.

a. ♂ ad. sk.	Gishtigan - Bampusht, Persian Baluchistan, Feb. 28, 1872.	W. T. Blanford, Esq. [C.].
b. ♀ ad. sk.	Pishin, Persian Baluchistan, Feb. 8, 1873.	W. T. Blanford, Esq. [C.].
c. ♂ ad. sk.	Shikarpore, Afghanistan (*Griffith*).	India Museum. (Type of *R. phœnicuroides*, Moore.)
d. ♂ imm. sk.	Koshuk Pass (*Griffith*).	India Museum.
e. ♂ ad. sk.	Hyderabad, Scinde (*Dr. Gould*).	India Museum.
f. ♂ ad. sk.	Cashmere.	Purchased.
g, *h*. ♂ ♀ ad. sk.	Valley of Astor, Cashmere, Sept.	R. B. Sharpe, Esq. [P.].
i, *k*. ♂ ad.; *l*, *m*. ♀ ad. sk.; *n*, *o*. ♂ ♀ ad. sk.	N.W. Himalayas, near Dhurmsala.	Capt. Stackhouse Pinwill [P.].
p. ♀ ad. sk.	Thibet.	Earl of Gifford [P.].
q, *r*. ♂ ♀ ad. st.	Behar.	B. H. Hodgson, Esq. [P.].
s, *t*. ♂ ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
u, *v*. ♂ ad.; *w*. ♀ ad. sk.	Nepal. (Types of *Phœnicura nipalensis*, Hodgson, and *R. nipalensis*, Moore.)	B. H. Hodgson, Esq. [P.].
x. ♂ ad. sk.	Kashgar (*Dr. Bellew*).	India Museum.
y, *z*, *a'*. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].

b', *c'*. ♂ ♀ ad. sk.	Nepal (*B. H. Hodgson*).	India Museum.
d', *e'*. ♂ ad. sk.	Kamptee.	Dr. B. Hinde [P.].
f'. ♂ ad. sk.	Saugor (*Hooper*).	India Museum.
g'. ♂ ad. sk.	Bootan (*Pemberton*).	India Museum.
h'. ♂ ad. sk.	Assam (*Griffith*).	India Museum.
i'. ♂ ad. sk.	Manrak Mountains, Saisan, Central Asia, May 28, 1876 (*O. Finsch*).	Bremen Geogr. Soc.
k', *l'*, *m'*. ♂ imm.	Kashgar (*Dr. Bellew*).	India Museum.
n', *o'*. ♀ imm.	Kashgar (*Dr. Bellew*).	India Museum.
p'. ♂ ad.	Kashgar (*Dr. Bellew*).	India Museum.
q'. ♂, *r'*. ♀ ad. sk.	Gilgit, Cashmere, April 1879.	Dr. J. Scully [P.].

6. Ruticilla semirufa.

Sylvia semirufa, *Hempr. et Ehr. Symb. Phys., Aves*, fol. bb (1833).
Ruticilla semirufa (*Hempr. et Ehr.*), *Licht. Nomencl. Av.* p. 28 (1854); *Heugl. Orn. N.O.-Afr.* i. p. 335 (1869); *Shelley, B. Egypt*, p. 84 (1872).

This species differs from the preceding, not only in being on an average slightly smaller, but also in having a considerable quantity of black on the under wing-coverts. It is scarcely more than a local race, as many examples of the Eastern form also show some black on the under wing-coverts. Length of wing—males 3·1 to 2·9 inches, females 3·06 to 2·62; tail 2·2 to 1·8, culmen 0·6 to 0·52, tarsus 0·91 to 0·9.

The Palestine Redstart breeds in Palestine and Syria, and has occurred in Egypt. Nothing is known of its migrations.

a. ♀ ad. sk.	Afka, Lebanon.	Canon Tristram [C.].
b. ♂ ad. sk.	Below Ainât, Lebanon.	Canon Tristram [C.].
c. Juv. sk.	Ainât, Lebanon (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].

7. Ruticilla hodgsoni.

Phœnicura reevesii, *Gray, apud Blyth, J. A. S. Beng.* xii. p. 963 (1843).
Phœnicura ruticilloides, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. lxxv. figs. 1, 1*a*, nos. 403, 405, *undè*
Phœnicura ruticilla, *Swains. apud Hodgs. Gray's Zool. Misc.* p. 82 (1844).
Ruticilla reevesii (*Gray*), *apud Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 67 (1846); *apud Gray, Gen. B.* i. p. 180 (1846).
Ruticilla erythrogastra (*Güld.*), *apud Blyth, Cat. B. Mus. As. Soc.* p. 168 (1849).
Ruticilla hodgsoni, *Moore, P. Z. S.* 1854, p. 26, pl. lviii.; *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 303 (1854); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 33 (1863); *Jerdon, B. Ind.* ii. p. 138 (1863); *Gray, Hand-l. B.* i. p. 221. no. 3165 (1869); *Swinhoe, P. Z. S.* 1871, p. 358; *Prjev. Rowley's Orn. Misc.* ii. p. 175 (1877); *David et Oust. Ois. Chine*, p. 171 (1877); *Godw.-Aust. J. A. S. Beng.* xlvii. pt. 2, p. 18 (1878).

In the *adult male in fall autumn plumage* the general colour of the upper parts is a dull slate-grey, shading into white on the fore-

head and into bright chestnut on the rump and upper tail-coverts; a narrow line at the base of the upper mandible, the lores, feathers behind the eye, ear-coverts, cheeks, chin, and throat black; quills and primary-coverts brown; a white patch on the wing, formed by the basal half of the outer webs of the innermost and two or three adjoining secondaries being white; greater, median, and lesser wing-coverts dark brown, the outside webs margined with slate-grey; tail bright chestnut, the two central feathers more or less brown; axillaries, under wing-coverts, breast, belly, flanks, and under tail-coverts bright chestnut. Bill, legs, feet, and claws black. Wings with the fourth and fifth primaries nearly equal and longest, second primary equal in length to the eighth or ninth, bastard primary 1·0 to 0·91 inch. Length of wing 3·29 to 3·05, tail 2·85 to 2·6, culmen 0·6 to 0·56, tarsus 1·0 to 0·9.

In the *adult female in full autumn plumage* the general colour of the upper and under parts, including the wings, is greyish brown, paler on the chin, axillaries, and under wing-coverts, shading into nearly white on the centre of the belly, and into very pale chestnut on the under tail-coverts, and into rich chestnut on the upper tail-coverts. In *spring* little change takes place, except that the white on the forehead of the male becomes of somewhat larger extent. It is not known that *birds of the year* differ from adults. *Young in first plumage* appear to be unknown.

Hodgson's Redstart breeds in the mountains of Western China, and winters in the valleys of the Himalayas from Nepal to Assam.

a. ♂ ad. sk.	India (*As. Soc.*).	India Museum.
b. ♀ ad. sk.	Pushut, Afghanistan (*Griffith*).	India Museum.
c. ♂ ad.; *d*, *e.* ♀ ad. sk.	Nepal. (Types of *Phœnicura ruticilloides*, Hodgs.)	B. H. Hodgson, Esq. [P.].
f, *g.* ♂; *h.* ♀ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
i. ♂ ad.; *k*, *l.* ♀ ad. sk.	Nepal (*Hodgson*). (Types of *Ruticilla hodgsoni*, Moore.)	India Museum.
m, *n.* ♂ ♀ ad. sk.	Bootan (*Pemberton*).	India Museum.
o. ♂ ad. sk.	Assam (*McClelland*).	India Museum.

8. Ruticilla aurorea.

Daurian Warbler, *Lath. Gen. Syn.* ii. pt. 2, p. 400 (1783).

Motacilla aurorea, *Gmel. Syst. Nat.* i. p. 976 (1788, *ex Lath.*); *Pall. Reis. Russ. Reichs*, iii. p. 695 (1776); *id. Zoogr. Rosso-Asiat.* i. p. 477 (1811); *Kittl. Kupf. Nat. Vög.* pl. xxvi. fig. 1 (1832).

Sylvia aurorea (*Gmel.*), *Lath. Ind. Orn.* ii. p. 527 (1790).

Sylvia (Phœnicura) reevesii, *Gray, Zool. Misc.* 1831, p. 1.

Phœnicura reevesii (*Gray*), *McClelland, P. Z. S.* 1839, p. 161.

Phœnicura leucoptera, *Blyth, J. A. S. Beng.* xii. p. 962 (1843).

Ruticilla leucoptera (*Blyth*), *Gray, Gen. B.* i. p. 180 (1846); *Blyth, J. A. S. Beng.* xvi. p. 134 (1847); *id. Cat. B. Mus. As. Soc.* p. 168 (1849); *Bp. Consp.* i. p. 296 (1850); *Moore, P. Z. S.* 1854, p. 28; *Gray, Hand-l. B.* i. p. 221. no. 3160 (1869).

Ruticilla aurorea (*Gmel.*), *Gray, Gen. B.* i. p. 180 (1846); *Bp.*

Consp. i. p. 296 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 305 (1854); *Swinhoe, Ibis*, 1863, p. 299; *Jerd. B. Ind.* ii. p. 139 (1863); *Gray, Hand-l. B.* i. p. 221. no. 3159 (1869); *Swinh. P. Z. S.* 1871, p. 358; *Godw.-Aust. J. A. S. Beng.* xliii. pt. 2, p. 166 (1874); *Blyth & Wald. B. Burm.* p. 101 (1875); *Tacz. Bull. Soc. Zool. France*, i. p. 143 (1876); *Hume, Stray Feath.* viii. p. 64 (1879); *Prjev. Rowley's Orn. Misc.* ii. p. 173 (1877); *David et Oust. Ois. Chine*, p. 170, pl. xxvi. (1877); *Blakiston & Pryer, Ibis*, 1878, p. 239.

Lusciola aurorea (*Gmel.*), *Temm. et Schl. Faun. Japon., Aves*, p. 56, pl. xxi. D (1847).

Lusciola (Ruticilla) phœnicurus (*Linn.*), var. aurorea (*Pall.*), *Schrenck, Reis. u. Forsch. Amur-Lande*, i. pt. 2, p. 359 (1860).

Sylvia (Ruticilla) aurorea (*Gmel.*), *Radde, Reis. Sibir. Vög.* p. 255 (1863).

In the *adult male in full autumn plumage* the head and nape are slate-grey, the tips of the feathers being brown, half concealing pale blue centres, slightly paler behind the eye; a narrow line at the base of the upper mandible, the chin, throat, cheeks, ear-coverts, lores, sides of the neck, back, scapulars, and wing-coverts are black, the feathers occasionally fringed here and there with brown; quills dark brown, approaching black on the innermost secondaries, the latter tipped with brown; the basal half of the secondaries is white, forming a white patch on the wing; rump and upper tail-coverts bright chestnut; tail bright chestnut, except the two centre feathers and the terminal half of the outer web of the outside feather on each side, which are dark brown, occasionally mixed with bright chestnut; breast, axillaries, under wing-coverts, belly, flanks, and under tail-coverts bright chestnut; inner margin of quills pale brown, except that of the basal half of secondaries, which is white. Bill black; legs, feet, and claws dark brown. Wings with the fourth and fifth primaries nearly equal and longest, second primary equal to the eighth or ninth, bastard primary 0·92 to 0·8 inch. Length of wing 2·95 to 2·8 inches, tail 2·5 to 2·4, culmen 0·6 to 0·52, tarsus 0·92 to 0·87.

In the *adult female in full autumn plumage* the general colour is sooty brown, paler on the underparts, especially on the centre of the belly, the rump, tail, and upper and under tail-coverts alone being of the same colour as those of the male, but not quite so bright; the quills and wing-coverts are brown, and the white patch on the wing is less extensive. *In the spring* the black parts of the male become deeper black by the disappearance of the few brown edgings to the feathers observable after the autumn moult; otherwise little change takes place. It is not known that *birds of the year* differ from adults. *Young in first plumage* have pale centres and dark terminal bands to most of the small feathers of both the upper and under parts.

The Daurian Redstart breeds in the forests of South-east Siberia, East Mongolia, North China, and the mountains of Japan. It winters in the plains of Japan, Formosa, Hainan, and South China, a few wandering as far as Assam, the Malay peninsula, Java, and Timor.

a. ♂ ad. st.	Japan.	India Museum.
b. ♂ ad. sk.	Hakodadi, Japan.	Col. St. John [C.].
c. ♀ ad. sk.	Yokohama, Japan.	H. Pryer, Esq. [C.].
d, e, f. ♂ ad. sk.	China.	J. R. Reeves, Esq. [P.].
g. ♂ ad. sk.	Amoy (*Leyden Museum*).	F. Godman and O. Salvin, Esqrs. [P.].
h, i. ♂ ad. sk.	Assam (*McClelland*).	India Museum.
k. ♂ ad. sk.	Bootan (*Pemberton*).	India Museum.
l. ♂ ad. st.	Timor (*Leyden Museum*).	Purchased.
m. ♀ ad. sk.	Timor (*Leyden Museum*).	Purchased.

9. Ruticilla erythrogastra.

Motacilla erythrogastra, *Güld. Nov. Com. Petrop.* xix. p. 469, pls. 16, 17 (1775).

Chestnut-bellied Warbler, *Lath. Gen. Syn.* ii. pt. 2, p. 424 (1783).

Sylvia erythrogastra (*Güld.*), *Lath. Ind. Orn.* ii. p. 513 (1790).

Motacilla ceraunia, *Pallas, Zoogr. Rosso-Asiat.* i. p. 478 (1811).

Lusciola aurorea (*Gmel.*), *apud Keys. u. Blas. Wirb. Eur.* pp. lix, 191 (1840).

Ruticilla aurorea (*Gmel.*), *apud Bonap. Cat. Metod. Ucc. Eur.* p. 39 (1842).

Lusciola erythrogastra (*Güld.*), *Schl. Rev. Crit.* p. xxxi (1844); *Fritsch, Vög. Eur.* p. 186 (1870).

Ruticilla grandis, *Gould, P. Z. S.* 1849, p. 112.

Ruticilla erythrogastra (*Güld.*), *Blyth, Cat. B. Mus. As. Soc.* p. 168 (1849); *Bp. Consp.* i. p. 296 (1850); *Gould, B. Asia*, i. pl. 49 (1851); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 304 (1854); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Jerd. B. Ind.* ii. p. 139 (1863); *Degl. et Gerbe, Orn. Eur.* i. p. 444 (1867); *Gray, Hand-l. B.* i. p. 222. no. 3175 (1869); *Hume & Henders. Lahore to Yark.* p. 210 (1873); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Dresser, Ibis*, 1876, p. 77; *Tacz. Bull. Soc. Zool. France*, i. p. 143 (1876); *Prjev. Rowley's Orn. Misc.* ii. p. 177 (1877); *David et Oust. Ois. Chine*, p. 542 (1877); *Dresser, B. Eur.* pt. lxvi. (1878); *Bogd. B. Cauc.* p. 97 (1879).

Ruticilla tricolor, *Gould, fide Bp. Consp.* i. p. 296 (1850).

Ruticilla vigorsi, *Moore, P. Z. S.* 1854, p. 27; *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 304 (1854); *Gray, Hand-l. B.* i. p. 221. no. 3170 (1869).

Chamærrhous erythrogastra (*Güld.*), *Bp. Compt. Rend.* xxxviii. p. 8 (1854).

Sylvia (Ruticilla) erythrogastra (*Güld.*), *Radde, Reis. Sibir. Vög.* p. 257 (1863).

Ruticilla (Adelura) erythrogastra (*Güld.*), *Blanford, J. A. S. Beng.* xli. pt. 2, p. 51 (1872).

In the *adult male in full autumn plumage* the forehead, crown, and nape are pale grey, any disturbance of the feathers showing their white centres; a narrow line at the base of the upper mandible, the lores, ear-coverts, sides of the neck, cheeks, chin, throat, breast, upper and under wing-coverts, back, and scapulars are black; quills dark brown, with a white spot on the wing caused by the base of the primaries, the basal two thirds of the secondaries on both webs, and the basal half of the outer web of the largest innermost secondary being white; rump, upper tail-coverts, tail, axillaries, belly, flanks, and under tail-coverts chestnut, slightly

darker on the two centre tail-feathers. Bill, legs, feet, and claws black. Wings with the third, fourth, and fifth primaries nearly equal and longest; second primary about equal to the seventh; bastard primary 1·2 inch. Length of wing 4·3 to 4·05 inches, tail 3·3 to 3·01, culmen 0·6 to 0·59, tarsus 1·1.

In the *adult female in full autumn plumage* the general colour of the upper parts, including the quills, is drab, slightly darker on the lores and ear-coverts, and nearly white on the margins of the greater wing-coverts and innermost secondaries; the rump, upper tail-coverts, and tail are a somewhat duller chestnut than in the male. The underparts are drab, slightly paler on the chin, axillaries, under wing-coverts, inner margin of quills, and centre of belly, and suffused with pale chestnut on the under tail-coverts. The only changes of importance which take place *in spring* are that in the male the grey margins to the feathers of the head are partially cast, leaving the white centres more conspicuous, and in the female the pale edges to the greater wing-coverts and innermost secondaries become more or less abraded. *Birds of the year* do not differ from adults. *Young in first plumage* have very obscure pale centres to the feathers of the upper and under parts; the male resembles the female, except in having the wings of the adult male, with the addition of buff tips to the wing-coverts and innermost secondaries.

Güldenstadt's Redstart breeds in the birch- and pine-regions of the Caucasus, Turkestan, the Himalayas, and the mountain-ranges between Thibet and China. It has also occurred near Lake Baical. In winter it descends into the valleys.

a. ♀ ad. sk.	Yarkand.	R. B. Sharpe, Esq. [P.].
b. ♂ ad. sk.	Cashmere.	Purchased.
c. ♂ ad. sk.	Cashmere.	India Museum.
d. ♂ ad. sk.	Nepal (*Hodgson*).	India Museum.
e. ♀ ad. sk.	Bootan (*Pemberton*).	India Museum. (Type of *R. vigorsi*, Moore.)
f, *g*. ♂ ad. sk.	Kashgar (*Dr. Bellew*).	India Museum.
h. ♂, *i*. ♀ ad. sk.	Gilgit, Cashmere, Feb. 1880.	Dr. J. Scully [P.].

10. Ruticilla erythronota.

Sylvia erythronota, *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* fasc. ii. p. 11 (1841).

Ruticilla erythronota (*Eversm.*), *Bp. Consp.* i. p. 297 (1850); *Gray, Hand-l. B.* i. p. 221. no. 3167 (1869); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Dresser, Ibis*, 1876, p. 77; *Blanf. East. Pers.* ii. p. 167 (1876); *Tacz. Bull. Soc. Zool. France*, i. p. 143 (1876).

Sylvia (Ruticilla) erythronota (*Eversm.*), *Middend. Reis. Sibir. Zool.* ii. pt. 2, p. 175 (1853).

Ruticilla rufogularis, *Moore, P. Z. S.* 1854, p. 27, pl. lix.; *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 306 (1854); *Gray, Hand-l. B.* i. p. 221. no. 3169 (1869); *Hume**, *Ibis*, 1870, p. 530.

Ruticilla alaschanica, *Prjev. Rowley's Orn. Misc.* ii. p. 175, pl. liv. fig. 2 (1877).

In the *adult male in full autumn plumage* the head and nape are slate-grey, the tips of the feathers being brown, half concealing pale

* Spelt *rufigularis*.

blue centres; a narrow line at the base of the upper mandible, the lores, ear-coverts, and sides of the neck are black, each feather more or less indistinctly tipped with brown; the back, rump, and upper tail-coverts are bright chestnut, each feather of the back fringed with brown; the scapulars are black, similarly fringed; quills brown, the innermost secondaries dark brown, the outside webs narrowly margined with white; primary-coverts white, broadly tipped with dark brown; greater wing-coverts dark brown, narrowly tipped with white; median wing-coverts white; lesser wing-coverts brown; tail bright chestnut, except the two centre feathers and the terminal half of the outer web of the outside feather on each side, which are dark brown, occasionally mixed with bright chestnut. Chin, throat, breast, and flanks bright chestnut, each feather more or less obscurely tipped with pale buffish brown, which is the colour of the belly; under tail-coverts with a more distinct shade of chestnut; axillaries and under wing-coverts white; inner margin of quills buffish brown. Bill, legs, feet, and claws black. Wing with the fourth and fifth primaries nearly equal and longest, second primary intermediate in length between the seventh and eighth, bastard primary 1·1 to 1·0 inch. Length of wing 3·5 to 3·4 inches, tail 2·85 to 2·75, culmen 0·6 to 0·46, tarsus 1·0 to 0·9.

In *the female* the wings, rump, tail, and upper and under tail-coverts are coloured as in the male. The rest of the plumage is an almost uniform greyish brown, paler on the chin and centre of belly. *In spring* the brown edges to the feathers are most of them cast, leaving the head and nape greyish white, mottled with brown, and the back, throat, and breast rich chestnut, only streaked here and there with pale brown. *Birds of the year* and *young in first plumage* appear to be unknown.

Eversmann's Redstart breeds in the pine- and birch-districts of Turkestan, South-western Mongolia, and South-eastern Siberia. In winter it descends into the valleys, and has been obtained in the North-western Himalayas, South Persia, and Eastern Asia Minor.

a. ♂ ad. sk.	Tashkend, March 20, 1866 (*Severtzoff*).	R. B. Sharpe, Esq. [P.].
b. ♂ ad. sk.	Near Tashkend, Nov. 18, 1874.	India Museum.
c. ♂ ad. sk.	Shiraz, Persia, Nov. 1870.	Col. St. John [C.].
d. ♂ ad. sk.	Khist, Persia, Jan. 1871.	Col. St. John [C.].
e, *f*. ♂ ♀ ad. sk.	Pushut, Afghanistan (*Griffith*).	India Museum. (Types of *R. rufogularis*, Moore.)
g. ♂ ad. sk.	N.W. India.	R. B. Sharpe, Esq. [P.].
h. ♂, *i*, *k*. ♀ ad. sk.	Kashgar (*Dr. Bellew*).	India Museum.
l. ♂, *m*. ♀ ad. sk.	Gilgit, Cashmere, Jan. 19, 1880.	Dr. J. Scully [P.].

11. Ruticilla frontalis.

Phœnicura frontalis, *Vigors*, *P. Z. S.* 1831, p. 172; *Gould*, *Cent. B. Himal. M.* pl. xxvi. fig. 1 (1832); *Blyth*, *J. A. S. Beng.* xi. p. 190 (1842).

Ruticilla melanura, *Less. Rev. Zool.* 1840, p. 265.

Phœnicura tricolor, *Hodgs. MS. Drawings* (*in the Brit. Mus.*) *of B.*

of Nepal, Passeres, pl. lxxvi. fig. 1. no. 482, fig. 2. no. 483, pl. lxxvii. fig. 1. no. 482, fig. 2. no. 483, pl. lxxviii. fig. 3. no. 406, *undè Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Ruticilla frontalis (*Vigors*), *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 68 (1846); *Blyth, J. A. S. Beng.* xvi. p. 134 (1847); *Gray, Gen. B.* i. p. 180 (1848); *Blyth, Cat. B. Mus. As. Soc.* p. 168 (1849); *Bp. Consp.* i. p. 296 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 308 (1854); *Jerd. B. Ind.* ii. p. 141 (1863), *Gray, Hand-l. B.* i. p. 221. no. 3162 (1869); *Godw.-Aust. J. A. S. Beng.* xxxix. pt. 2, p. 270 (1870); *Swinh. P. Z. S.* 1871, p. 358; *Hume & Henders. Lahore to Yark.* p. 211 (1873); *Prjev. Rowley's Orn. Misc.* ii. p. 174 (1877); *David et Oust. Ois. Chine*, p. 168 (1877).

Adult male in full autumn plumage. Forehead and supercilium cobalt-blue, shading on the crown into blue-black, which extends over the whole head and neck including the mantle and scapulars; the blue-black feathers are tipped with chestnut, causing these parts to appear to be dusted over with brown; the primaries and secondaries are brown, with narrow pale margins to the outside edges; the innermost secondaries are dark brown, broadly margined on the outside edges with chestnut; the lesser wing-coverts are dark blue, with narrow pale edges; the median and greater wing-coverts are black with broader chestnut edges, and the primary coverts are dark brown with obscure pale edges; the lower back, rump, and upper tail-coverts are rich chestnut; the two centre tail-feathers are black, margined with chestnut on the outer edge towards the base; the rest of the tail-feathers are rich chestnut, with the terminal half of the outside web of each outside feather and the tips of all the feathers for about half an inch black. Sides of the neck, ear-coverts, cheeks, chin, throat, and fore neck blue-black, dusted over with brown; the rest of the underparts rich chestnut, somewhat paler in the centre of the belly; axillaries chestnut, with concealed dusky bases; thighs sooty brown. Bill, legs, and claws black. Wing considerably rounded and concave; fourth and fifth primaries nearly equal and longest, second primary about equal to the eighth; bastard primary 1·1 to 0·9 inch, rather broad, not quite half the length of the second primary. Length of wing 3·6 to 3·4 inches (females 3·5 to 3·2), tail 2·9 to 2·7, culmen 0·61 to 0·54, tarsus 1·0 to 0·92.

In the *adult male in breeding-plumage* the chestnut tips of the feathers which are blue-black have become entirely abraded, causing the dusted appearance of these parts to disappear. The chestnut and pale edges to the wing-coverts and innermost secondaries have also almost all been abraded.

Adult female in full autumn plumage. General colour of the upper parts rich sooty brown, with a shade of chestnut on the forehead and shading into rich chestnut on the rump and upper tail-coverts; quills brown, with obscure, narrow, pale margins on the outside edges; innermost secondaries and wing-coverts dark brown, with broader brownish-white margins on the outside edges; two centre tail-feathers dark brown, with chestnut margins on the basal half of the outside edges; the rest of the tail-feathers rich chestnut, three-fourths of the terminal portion of the outside edge of the outside feather on each side and the apex of each of the remaining feathers

for about half an inch being brown. The underparts are paler sooty brown, shading into pale chestnut on the chin and the centre of the belly; axillaries and under wing-coverts pale chestnut, with concealed dusky bases; under tail-coverts rich chestnut.

In *breeding-plumage* the pale edges to the wing-coverts and innermost secondaries have disappeared by abrasion, and the pale chestnut of the chin and centre of the belly has faded into pale brown. It is not known that *birds of the year* differ from adults. *Young in first plumage* resemble the adult female, but have pale centres and dark margins to the feathers of both the upper and under parts.

The Blue-fronted Redstart breeds in the pine-forests of the mountain-chains which form the western, southern, and eastern boundaries of Thibet, Cashmere, Nepal, Sikkim, Assam, Moupin, and Kansu, descending into the valleys during the cold season.

a. ♂ ad. sk.	Thibet.	Earl of Gifford [P.].
b. ♂ ad. sk.	Cashmere.	R. B. Sharpe, Esq. [P.].
c, *d*. ♂ ad.; *e*, *f*. Juv. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
g. ♂ ad. sk.	Near Dhurmsala.	Capt. Stackhouse Pinwill [P.].
h. ♀ ad. sk.	Kumaon (*Strachey*).	India Museum.
i, *k*. ♂ ♀ ad.; *l*. Juv. st.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Phœnicura tricolor*, Hodgs.)
m, *n*. ♂ ad.; *o*, *p*. ♀ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
q. ♂ ad., *r*. Juv. sk.	Nepal.	B. H. Hodgson, Esq. [P.].
s. ♂ ad.; *t*, *u*. ♀ ad.; *v*. Juv. sk.	Nepal (*Hodgson*).	India Museum.
w, *x*. ♂ ♀ ad. sk.	Darjiling (*Pearson*).	India Museum.
y, *z*. ♂ ♀ ad. sk.	Bootan (*Pemberton*).	India Museum.

12. Ruticilla schisticeps.

Phœnicura schisticeps, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. lxxix. no. 813, *undè Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Ruticilla schisticeps (*Hodgs.*), *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 69, *App.* p. 153 (1846); *Moore, P. Z. S.* 1854, p. 29; *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 307 (1854); *Jerd. B. Ind.* ii. p. 140 (1863); *Gray, Cat. Mamm. &c. Nepal Coll. Hodgs.* p. 34 (1863); *Gray, Hand-l. B.* i. p. 221. no. 3164 (1869); *Pryer. Rowley's Orn. Misc.* ii. p. 175 (1877).

Ruticilla nigrogularis, *Moore, P. Z. S.* 1854, p. 29, pl. lxi.; *Jerdon, B. Ind.* ii. p. 140 (1863); *Gray, Hand-l. B.* i. p. 221. no. 3171 (1869); *Hume, Stray Feath.* iv. p. 497 (1876).

Adult male in full autumn plumage. Forehead and crown (with the exception of a narrow black band at the base of the bill) cobalt-blue, the black bases of the feathers becoming conspicuous on the occiput, nape, and hind neck; mantle and lower back black; the feathers of the rump and upper tail-coverts deep rich chestnut with concealed black bases; scapulars black, with the terminal half of the inside web deep rich chestnut; lesser wing-coverts black; median wing-coverts white; greater and primary wing-coverts black;

primaries and secondaries dark brown; innermost secondaries nearly black, with a broad white margin on the outer edge; tail-feathers black, with concealed chestnut bases, except the two central feathers, which are black throughout. Sides of the neck, ear-coverts, cheeks, chin, throat, and fore neck black, with the exception of a large, irregular, round, white spot in the centre of the lower throat and fore neck; the rest of the underparts deep rich chestnut, the feathers of the centre of the belly tipped with white; axillaries and under wing-coverts black with white tips; thighs black. Bill, legs, and claws black. Wing considerably rounded and concave; fourth and fifth primaries nearly equal and longest, second primary intermediate in length between the ninth and tenth; bastard primary 1·05 to 0·95 inch, rather broad, not quite half the length of the second primary. Length of wing 3·2 to 3·1 inches, tail 2·8 to 2·7, culmen 0·6 to 0·56, tarsus 0·95 to 0·9.

In the *adult male in breeding-plumage* the cobalt-blue on the crown has nearly disappeared by abrasion, but remains conspicuous on the forehead and supercilium. The dark brown of the wings has faded into brown, and the chestnut of both the upper and under parts is less deep and rich.

Adult female in full autumn plumage. General colour of the upper parts rich sooty brown, with a slight tinge of pale cobalt on the forehead, and of chestnut on the tips of the scapulars; the feathers of the rump and upper tail-coverts deep rich chestnut, with concealed dark bases; lesser wing-coverts dark brown, with obscure pale edges; median wing-coverts white; greater wing-coverts dark brown, with obscure pale chestnut edges; primary wing-coverts brown; quills brown, with an obscure narrow chestnut-brown margin to the outer edges; innermost secondaries dark brown, with narrow white margins to the outer edges, tinged with rufous towards the tips; tail dark brown, the basal half more or less tinged with chestnut, except the two central feathers, which are dark brown throughout. The general colour of the underparts is a somewhat duller sooty brown, with an irregular white spot, somewhat smaller than that of the male, in the centre of the lower throat and fore neck. The centre of the belly shows more white than in the male, and a trace of chestnut is observable; the under tail-coverts are pale chestnut; axillaries and under wing-coverts black with white tips; thighs dark brown.

I have been unable to meet with skins of *females in breeding-plumage* or of *young in first plumage*. *Immature birds* are said to want the white spot on the throat, or to have it imperfectly developed, and in this plumage have been described as *R. nigrogularis*.

The White-throated Redstart breeds in the wooded valleys of Kansu, and winters in Nepal and Sikkim. It probably breeds also in the pine-regions of the latter countries.

a. ♂ ad. sk.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Phœnicura schisticeps*, Hodgs.)
b, *c*. ♂ ♀ ad. sk.	Nepal (*Hodgson*).	India Museum. (Type of *Ruticilla nigrogularis*, Moore.)

13. Ruticilla cærulocephala.

Phœnicura cærulocephala, *Vigors, P. Z. S.* 1830, p. 35; *Gould, Cent. B. Himal. M.* pl. xxv. fig. 2 (1832); *Blyth, J. A. S. Beng.* xi. p. 191 (1842); *Hodgs. Gray's Zool. Misc.* p. 83 (1844).

Phœnicura cæruleus, *Hodgs. MS. Drawings (in the Brit. Mus.) of B. of Nepal, Passeres*, pl. lxxv. fig. 3. no. 475, pl. lxxxiii. fig. 1. no. 475 (*icon. ined.*).

Ruticilla cærulocephala (*Vigors*), *Gray, Gen. B.* i. p. 180 (1846); *Blyth, J. A. S. Beng.* xvi. p. 134 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 168 (1849); *Bp. Consp.* i. p. 206 (1850); *Horsf. & Moore, Cat. B. Mus. E.I.Co.* i. p. 307 (1854); *Jerd. B. Ind.* ii. p. 141 (1863); *Gray, Hand-l. B.* i. p. 221. no. 3163 (1869); *Hume & Henders. Lahore to Yark.* p. 211, pl. xiv. (1873); *Dresser, Ibis*, 1876, p. 78.

Adelura cærulocephala (*Vigors*), *Bp. Compt. Rend.* xxxviii. p. 8 (1854); *Wardlaw Ramsay, Ibis*, 1880, p. 58.

Ruticilla lugens, *Severtz. Turkest. Jevotn.* pp. 65, 121 (1873); *id. Str. Feath.* 1875, p. 428.

In the *adult male in full autumn plumage* the head and nape are greyish brown, with concealed light blue centres to each feather; a narrow line at the base of the upper mandible, the lores, the feathers round and behind the eye, the chin, and the ear-coverts are black. The throat, breast, under wing-coverts, back, and scapulars are black, each feather obscurely margined with brown. Rump, upper tail-coverts, and tail black. Wings and wing-coverts black, except the median wing-coverts and the outside margin of the innermost secondaries, which are white; axillaries, belly, and under tail-coverts white; inner margin of quills brown. Bill, legs, feet, and claws black. Wings with the fourth and fifth primaries nearly equal and longest, second primary about equal to the ninth, bastard primary 0·9 inch. Length of wing 3·2 to 2·95 inches, tail 2·71 to 2·3, culmen 0·55 to 0·5, tarsus 0·9 to 0·88.

In the *adult female in full breeding-plumage* the general colour of both the upper and the under parts is greyish brown, slightly darker on the wings and tail, and paler on the centre of the belly, under tail-coverts, and axillaries; the upper tail-coverts are dull chestnut; the greater and median wing-coverts have white tips suffused with chestnut, and the innermost secondaries have pale margins. In *spring* the male has cast the tips of his feathers, the head and nape being in consequence pale blue, and the black parts without any brown margins to the feathers. Little change appears to take place in the plumage of the female. It is not known that *birds of the year* differ from adults, except in having the upper tail-coverts dull chestnut in both sexes. *Young in first plumage* have pale centres and black margins to most of the feathers of the upper and underparts; the wing-coverts are spotted as in the adult female, the outer webs of the innermost secondaries are broadly margined with white, and the upper tail-coverts are dull chestnut.

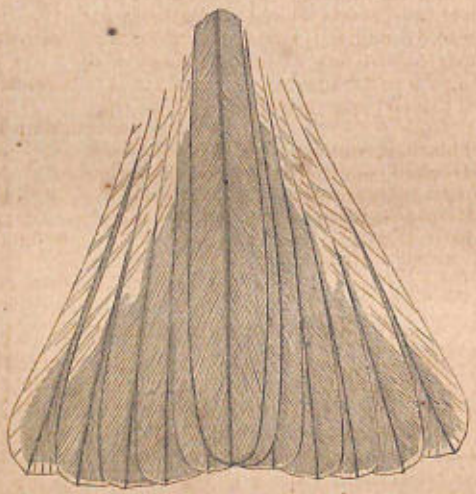
The Blue-headed Redstart breeds in the pine- and birch-districts of North-eastern Turkestan, Afghanistan, and the range of the Himalayas, descending into the valleys in winter.

a. ♂ ad. sk.	Pushut, Afghanistan (*Griffith*).	India Museum.
b. ♂ ad. sk.	Gilgit, Cashmere, June 23, 1879.	Dr. J. Scully [P.].
c. ♂, *d.* ♀ juv. sk.	Gilgit, Cashmere, July 8 and 11, 1879.	Dr. J. Scully [P.].

e. ♂ ad. sk.	Himalayas.	India Museum.
f. g. ♂ ♀ ad. sk.	Himalayas.	Dr. Stoliczka [P.].
h, i. ♂ ad. sk.	N.W. Himalayas.	Capt. Stackhouse Pinwill [P.].
k. ♂ ad. sk.	Chini, Koonawar, July 3, 1844.	India Museum.
l. ♂ ad. st.	Nepal.	B. H. Hodgson, Esq. [P.]. (Type of *Phœnicura cæruleus*, Hodgs.)
m. ♂ ad. sk.	Bootan (*Pemberton*).	India Museum.
n. ♂ ad. sk.	Dschasyl Kul, near Lepsa, Turkestan, May 15, 1876.	Dr. O. Finsch [C.].

10. MYRMECOCICHLA.

	Type.
Myrmecocichla, *Cab. Mus. Hein.* i. p. 8 (1850)	M. formicivora.
Cercomela, *Bp. Compt. Rend.* xliii. p. 766 (1856)	M. melanura.



Tail of *Myrmecocichla pollux*.

The genus *Myrmecocichla* comprises a small group of birds which connect the Chats with the Robins. From the former they may always be known by the pattern of the tail, which is either wanting altogether, or present in only a rudimentary form. Where there is any white at the base or outside webs of any of the tail-feathers, the species may at once be distinguished by the emarginated tip of the second primary. It is not so easy to give characters which shall always separate them from the Robins. Their black or dark-brown legs will separate them from the plain-coloured Robins; and the absence of brilliant colours, such as crimson or rich chestnut, and of violent contrasts in the colours of the cheeks and throat, will separate them from the darker-legged Robins. The bill is black and Saxicoline in shape; and the rictal bristles are small. The tail consists of twelve feathers and is slightly rounded.

In their habits these birds are more Chats than Robins, frequenting rocks and open ground.

Five species are residents in South Africa; two are found in Abyssinia, one of which extends to Palestine, whilst the eighth species is a resident in North-western India.

Key to the Species.

a. Scapulars or lesser wing-coverts white.
(Subgeneric group MYRMECOCICHLÆ.)
a'. Throat black; breast and belly buffish white. *bifasciata*, p. 355.
b'. Throat, breast, and belly brown ..... *formicivora*, p. 356.
b. Scapulars and lesser wing-coverts nearly uniform brown or grey like the back.
c'. Second primary emarginated at the tip.
(Subgeneric group SINUATOIDÆ.)
a''. Upper tail-coverts slaty brown. Length of wing 4·2 to 4·0 inches ..... *pollux*, p. 357.
b''. Upper tail-coverts white. Length of wing 3·8 to 3·3 inches ..... *cinerea*, p. 358.
c''. Upper tail-coverts chestnut. Length of wing 2·9 to 2·8 inches ..... *sinuata*, p. 359.
d'. Second primary not emarginated at the tip.
(Subgeneric group CERCOMELÆ.)
d''. Tail black, in contrast with the brown back.
a'''. General colour of the upper and underparts russet-brown ..... *fusca*, p. 360.
b'''. General colour of the upper and underparts grey ..... *melanura*, p. 360.
e''. Tail earthy brown, nearly the same colour as the back ..... *fuscicaudata*, p. 361.

1. Myrmecocichla bifasciata.

Saxicola bifasciata, *Temm. Pl. Col.* no. 472. fig. 2 (1829); *Gray, Gen. B.* i. p. 179 (1846); *Layard, B. S. Afr.* p. 104 (1867); *Gray, Hand-l. B.* i. p. 226. no. 3240 (1869); *Sharpe, Cat. Afr. B.* p. 27 (1871); *Blanf. & Dresser, P. Z. S.* 1874, p. 239; *Sharpe, ed. Layard's B. S. Afr.* p. 240 (1876).
Campicola bifasciata (*Temm.*), *Bp. Consp.* i. p. 304 (1850); *Cab. Mus. Hein.* i. p. 10 (1850).
Saxicola spectabilis, *Hartlaub, P. Z. S.* 1865, p. 428, pl. xxiii.

Adult male in breeding-plumage. Forehead and a distinct eye-stripe reaching to the nape buffish white; crown, nape, and back black, the feathers of the latter with brown margins; scapulars, rump, and upper tail-coverts white, more or less suffused with buff; wings and tail black. Lores, chin, throat, cheeks, ear-coverts, and sides of the neck black; axillaries and under wing-coverts black; the remainder of the underparts buff; inner margin of quills pale brown. Bill, legs, feet, and claws black. Wings with the third to the sixth primaries nearly equal and longest, second primary equal to the seventh, bastard primary 1·15 to 1·05 inch. Length of wing 3·75 to 3·3 inches, tail 2·5 to 2·25, culmen 0·75 to 0·72, tarsus 1·28 to 1·2.

The *female* is buffish brown on the upper parts, shading into dark buff on the rump and upper tail-coverts, with an obscure buff eye-stripe and obscure dark centres to the feathers of the head and back; wing-coverts and innermost secondaries dark brown, with buffish-brown margins. The underparts are brownish buff, with dark

shaft-lines to most of the feathers. *After the autumn moult* the feathers of the back, axillaries, and under wing-coverts of the *male* have white tips, and the innermost secondaries have white margins. No important change takes place in the plumage of the *female*. *Males of the year* have all the white parts entirely suffused with buff, and the crown and back coloured as in the female. *Young in first plumage* have pale buff centres and dark brown margins to the feathers of the crown, back, and breast; otherwise they resemble the female in autumn plumage.

The Black-throated Chat-Robin has been found in the Transvaal, the Orange Free State, Natal, and the North-east of Cape Colony. It is not known to be migratory.

a. ♂ ad. st.	South Africa.	Baron Laugier.
b, *c*. ♂ ♀ ad. sk.	Windvogelberg (*Bulger*).	P. L. Sclater, Esq. [P.]. (Types of *S. spectabilis*, Hartl.)
d, *e*. ♂; *f*. ♀ ad. sk.	Kingwilliamstown, July 23, 1877.	Herbert Trevelyan, Esq. [P.].
g, *h*. ♂; *i*. ♀ ad. sk.	Heights above Grahamstown (*T. C. Atmore*).	R. B. Sharpe, Esq.
k–*n*. ♂; *o*, *p*. ♀ ad. sk.	Elands Post (*T. C. Atmore*).	R. B. Sharpe, Esq.
q. ♂ ad. sk.	Witwater Rand.	F. A. Barratt, Esq. [C.].
r. ♂ ad. sk.	Drakensberg Mountains, Dec. 20, 1873.	T. C. Buckley, Esq. [P.].

2. Myrmecocichla formicivora.

Le Traquet fourmilier, *Levaill. Ois. d'Afr.* iv. p. 108, pls. 186, 187 (1805).
Œnanthe formicivora, *Vieill. N. Dict. d'Hist. Nat.* xxi. p. 421 (1818, *ex Levaill.*).
Saxicola formicivora (*Vieill.*), *Gray, Gen. B.* i. p. 179 (1846); *Chapman, Trav. S. Afr.* ii. p. 399 (1868); *Gray, Hand-l. B.* i. p. 227. no. 3263 (1869).
Sylvia formicivora (*Vieill.*), *fide Bp. Consp.* i. p. 302 (1850).
Myrmecocichla formicivora (*Vieill.*), *Bp. Consp.* i. p. 302 (1850); *Cab. Mus. Hein.* i. p. 8 (1850); *Hartl. Orn. W.-Afr.* p. 65 (1857); *Layard, B. S. Afr.* p. 110 (1867); *Sharpe, Cat. Afr. B.* p. 26 (1871); *Gurney, Anderss. B. Dam. Ld.* p. 110 (1872); *Sharpe, ed. Layard's B. S. Afr.* p. 231 (1876).
Myrmecocichla æthiops, *Cab. Mus. Hein.* i. p. 8 (1850); *Bp. Consp.* i. p. 302 (1850); *Hartl. Orn. W.-Afr.* p. 65 (1857).
Petrocincla formicivora (*Vieill.*), *Licht. Nomencl. Av.* p. 26 (1854).
Petrocincla æthiops (*Cab.*), *Licht. loc. cit.* (1854).
Saxicola æthiops (*Cab.*), *Gray, Hand-l. B.* i. p. 227. no. 3264 (1869).
Turdus æthiops, *Licht. fide Heugl. Orn. N.-O. Afr.* i. p. 365 (1869).
Thamnolæa æthiops (*Licht.*), *Heugl. op. cit.* p. 365 (1869).
Thamnolæa formicivora (*Vieill.*), *Heugl. op. cit.* p. 366 (1869).

Adult male in breeding-plumage. General colour of the whole plumage sooty brown, the feathers on the forehead, crown, throat, and breast having pale margins; lesser wing-coverts white; shafts of the primaries, and the basal half of the inner webs of the second to the fifth, and the whole of the inner web of the sixth to the tenth, except the tips, white. Bill, legs, feet, and claws black. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh,

bastard primary 1·1 to 0·9 inch. Length of wing 4·0 to 3·7 inches, tail 2·5 to 2·3, culmen 0·85 to 0·75, tarsus 1·4 to 1·3.

The *female* apparently differs from the male in being slightly paler in colour, and in not having any white on the wing-coverts. It is not known that any change takes place *after the autumn moult*. *Birds of the year* appear to have the white on the inner webs of the primaries slightly suffused with buff. It is supposed that the white on the wing-coverts of the male is not assumed until the second year. Some collectors assert that in fully adult plumage both sexes have white lesser wing-coverts.

The Ant-eating Chat-Robin has been found in various parts of South Africa, Damara Land, the Orange Free State, the east of Cape Colony, Natal, and the Transvaal. It is not known to be migratory. Its reported occurrence in Senegal and Nubia requires verification.

a.	Ad. sk.	South Africa (*E. L. Layard*).	R. B. Sharpe, Esq.
b.	Ad. st.	South Africa.	T. Campbell, Esq. [P.].
c.	Ad. sk.	Kingwilliamstown.	Herbert Trevelyan, Esq. [P.].
d.	♂ ad. sk.	Kingwilliamstown, May 24, 1877.	Herbert Trevelyan, Esq. [P.].
e.	Ad. sk.	Elands Post (*T. C. Atmore*).	R. B. Sharpe, Esq.
f.	♂ ad. sk.	Newcastle, May 30, 1874 (*F. Oates*).	C. G. & W. Oates, Esqrs. [P.].
g.	♀ ad. sk.	Potchefstroom, Transvaal, Dec. 26, 1876 (*W. Lucas*).	Dr. Exton [P.].
h.	♂ ad. sk.	Potchefstroom, Jan. 18, 1877 (*W. Lucas*).	Dr. Exton [P.].
i.	♂ ad. sk.	Potchefstroom, April 5, 1877.	Dr. Exton [P.].
k.	Ad. sk.	Ondonga, Ovampo, Oct. 30, 1866 (*C. J. Andersson*).	R. B. Sharpe, Esq.

3. Myrmecocichla pollux.

Saxicola pollux, *Hartlaub, P. Z. S.* 1865, p. 747; *Gray, Hand-l. B.* i. p. 225. no. 3230 (1869); *Blanf. & Dress. P. Z. S.* 1874, p. 235, pl. xxxviii. fig. 1; *Sharpe, ed. Layard's B. S. Afr.* p. 244 (1877).

General colour of the upper parts slaty brown, darker on the longest upper tail-coverts; lores and ear-coverts brown; wings and wing-coverts brown, with obscure narrow paler margins; two centre tail-feathers entirely dark brown, the outer web of each succeeding feather having more and more white at the base, until in the outermost tail-feathers on each side the whole outside web is white. Underparts grey, shading into nearly white on the axillaries, under wing-coverts, lower part of belly, and under tail-coverts; inner margin of quills pale brown. Bill, legs, feet, and claws black. Wings with the third, fourth, fifth, and sixth primaries nearly equal and longest, seventh primary much shorter, second primary intermediate in length between the sixth and seventh, and conspicuously emarginated at the tip on the inner web, bastard primary 1·0 to 0·95 inch. Length of wing 4·2 to 4·02 inches, tail 3·0 to 2·81, culmen 0·8 to 0·65, tarsus 1·3 to 1·25.

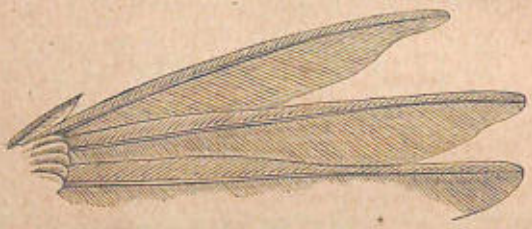
It is not known that the *female* differs in plumage from the male, or that any change takes place *after the autumn moult*. *Birds of the year* and *young in first plumage* appear to be unknown.

The greater Sickle-winged Chat-Robin has occurred in various localities of the northern parts of Cape Colony, where it is supposed to be a resident.

a, *b*. Ad. sk. South Africa. R. B. Sharpe, Esq.

4. Myrmecocichla cinerea.

Le Traquet tractrac, *Levaill. Ois. d'Afr.* iv. p. 103, pl. 184. fig. 1 (1805).
Œnanthe cinerea, *Vieill. N. Dict. d'Hist. Nat.* xxi. p. 437 (1818, ex *Levaill.*).
Sylvia cinerea (*Vieill.*), *Bonn. et Vieill. Enc. Méth.* ii. p. 493 (1820).
Saxicola tractrac, *Boie, Isis*, 1828, p. 320.
Saxicola levaillantii, *Smith, Ill. Zool. S. Afr. Birds, letterpress to* pl. xxviii. (1839).
Saxicola cinerea (*Vieill.*), *Gray, Gen. B.* i. p. 179 (1846); *Layard, B. S. Afr.* p. 105 (1867); *Gray, Hand-l. B.* i. p. 226. no. 3249 (1869); *Sharpe, Cat. Afr. B.* p. 26 (1871); *Blanf. & Dress. P. Z. S.* 1874, p. 235; *Sharpe, ed. Layard's B. S. Afr.* p. 242 (1877).
Dromolæa cinerea (*Vieill.*), *Bp. Consp.* i. p. 302 (1850); *Sundev. K. Sv. Vet.-Akad. Handl.* ii. no. 3, p. 45 (1857).
Erithacus schlegelii, *Wahl. Œfv. K. Vet.-Akad. Förh.* 1855, p. 213.
Saxicola modesta, *Tristram, Ibis*, 1869, p. 206; *Gray, Hand-l. B.* i. p. 225. no. 3237 (1869).
Saxicola schlegelii (*Wahl.*), *Gray, Hand-l. B.* i. p. 225. no. 3236 (1869); *Sharpe, Cat. Afr. B.* p. 27 (1871); *Gurney, Anderss. B. Dam. Ld.* p. 104 (1872); *Blanf. & Dress. P. Z. S.* 1874, p. 236, pl. xxxix. fig. 2; *Sharpe, ed. Layard's B. S. Afr.* p. 237 (1876).



Wing of *Myrmecocichla cinerea*.

General colour of the upper parts dull pale slate-grey; lores and ear-coverts brown; eye-stripe dull white, obscure, not extending beyond the lores; wings brown; wing-coverts brown, margined with pale slate-grey; secondaries and innermost secondaries narrowly margined with white at the tips: rump and upper tail-coverts white; two centre tail-feathers entirely dark brown, the outer web of each succeeding feather having more and more white at the base until, in the outermost tail-feather on each side, the whole outside web is white; underparts greyish white, shading into white on the vent and under tail-coverts; axillaries and under wing-coverts white, with concealed dusky bases; inner margin of quills pale brown. Bill, legs, feet, and claws black. Wings with the third, fourth, fifth, and sixth primaries nearly equal and longest; seventh primary much shorter; second primary intermediate in length between the sixth and seventh, and conspicuously emarginated at the

tip on the inner web; bastard primary 0·8 to 0·6 inch. Length of wing 3·85 to 3·7 inches (females 3·6 to 3·3), tail 2·7 to 2·3, culmen 0·7 to 0·61, tarsus 1·2 to 1·05.

The *female* differs from the male only in being smaller in size, and has been described as a different species. *After the autumn moult* the general colour of the plumage is browner, less sandy. *Birds of the year* and *young in first plumage* appear to be unknown.

The Lesser Sickle-winged Chat-Robin is found in Damara Land and Great Namaqua Land, extending southwards as far as the Karroo in Cape Colony. It is not known to be migratory.

a. ♂ ad. sk.	Great Namaqua Land.	C. J. Andersson, Esq. [C.].
b. ♂ ad. sk.	Otjimbinque, Damara Land, May 30, 1860 (*C. J. Andersson*).	R. B. Sharpe, Esq.
c–f. ♀ ad. sk.	Otjimbinque, Aug. 1863 (*C. J. Andersson*).	R. B. Sharpe, Esq.

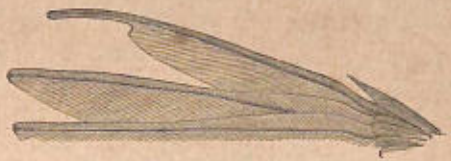
5. Myrmecocichla sinuata.

Luscinia sinuata, *Sundev. K. Sv. Vet.-Akad. Handl.* ii. no. 3, p. 44, note (1857).

Saxicola sinuata (*Sundev.*), *Layard, B. S. Afr.* p. 108 (1867); *Ayres, Ibis*, 1871, p. 155; *Sharpe, Cat. Afr. B.* p. 27 (1871); *Blanf. & Dress. P. Z. S.* 1874, p. 238; *Sharpe, ed. Layard's B. S. Afr.* p. 236 (1876).

Aedon sinuata (*Sundev.*), *Gray, Hand-l. B.* i. p. 211. no. 2987 (1869).

Ruticilla (Erythacus) sinuata (*Sundev.*), *Blanf. Ann. Nat. Hist.* 1869, iv. p. 329.



Wing of *Myrmecocichla sinuata*.

Adult male in breeding-plumage. General colour of the upper parts brown, scarcely darker on the lores, and shading into chestnut on the rump and dark chestnut on the upper tail-coverts; ear-coverts russet-brown; wings brown, the wing-coverts and secondaries edged with pale buffish brown; tail brown, nearly the whole of the outside web and the basal half of the inside web of the outside tail-feather on each side pale dull chestnut, the amount of chestnut lessening on each succeeding feather until the two centre feathers are entirely brown for the terminal two thirds; underparts pale grey, browner on the breast, and suffused with chestnut on the flanks and under tail-coverts; axillaries, under wing-coverts, and inner margin of quills pale buffish grey. Bill, legs, feet, and claws black. Wings with the third to the sixth primaries nearly equal and longest; second primary intermediate in length between the sixth and seventh, and emarginated at the tip to such an extent that for from an eighth

to a quarter of an inch the inside web is as narrow as the outside; bastard primary 0·65 to 0·6 inch. Length of wing 2·9 to 2·85 inches, tail 1·98 to 1·85, culmen 0·61 to 0·55, tarsus 1·13 to 0·95.

The *female* scarcely differs from the male; and no important change is produced by the *autumn moult*, which appears to take place in April. *Birds of the year* and *young in first plumage* appear to be unknown.

The Russet Sickle-winged Chat-Robin is common in the Cape Colony, extending its range northwards into the Transvaal. It is not known to be migratory, and is said to be Chat-like in its habits.

a. Ad. sk.	South Africa.	Sir A. Smith [P.].
b. Ad. sk.	South Africa (*E. L. Layard*).	R. B. Sharpe, Esq.
c,d. ♂ ♀ ad. sk.	Potchefstroom, Transvaal, May 15, 1877 (*W. Lucas*).	R. B. Sharpe, Esq. [P.].

6. Myrmecocichla fusca.

Saxicola fusca, *Blyth, J. A. S. Beng.* xx. p. 523 (1851); *id. J. A. S. Beng.* xxiv. p. 188 (1855); *Gray, Hand-l. B.* i. p. 226. no. 3243 (1869).

Cercomela fusca (*Blyth*), *Jerd. B. Ind.* ii. p. 134 (1863); *Hume, Nests and Eggs Ind. B.* p. 319 (1874); *Butler, Stray Feath.* 1875, p. 477.

General colour of the upper parts chocolate-brown, shading into paler chocolate-brown on the forehead; lores chocolate-brown; ear-coverts paler chocolate-brown; quills and wing-coverts dark brown; tail nearly black; underparts pale chocolate-brown, shading into dark brown on the under tail-coverts, axillaries, and under wing-coverts. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·95 inch. Length of wing 3·45, tail 2·5, culmen 0·65, tarsus 1·0.

It is not known that *the female* differs from the male; nor has any record been made of the difference in the colour of the plumage caused by *age* or *season*.

The Indian Chat-Robin breeds in Central India, extending towards the North-west Provinces. It is said to be a resident, and to resemble a Chat in its habits.

a. ♂ ad. sk.	India.	Capt. Boys [C.].

7. Myrmecocichla melanura.

Saxicola melanura, *Temm. Pl. Col.* no. 257, fig. 2 (1824); *Rüpp. Neue Wirb. Vög.* p. 80 (*circ.* 1835); *id. Syst. Uebers.* p. 58 (1845); *Gray, Gen. B.* i. p. 179 (1846); *Bp. Consp.* i. p. 304 (1850); *Cab. Mus. Hein.* i. p. 10 (1850); *Gray, Hand-l. B.* i. p. 226. no. 3242 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 361 (1869); *Sharpe, Cat. Afr. B.* p. 27 (1871).

Sylvia melanura (*Temm.*), *Hempr. et Ehr. Symb. Phys., Aves*, fol. cc (1833).

Sylvia lypura, *Hempr. et Ehr. Symb. Phys., Aves*, fol. ee (1833).

Cercomela asthenia, *Bp. Compt. Rend.* xlii. p. 766 (1856).

Pratincola melanura (*Temm.*), *Heugl. Syst. Uebers.* p. 27 (1856) *Tristram, Ibis*, 1867, p. 97.

Cercomela melanura (*Temm.*), *Jerd. B. Ind.* ii. p. 133 (1863).
Saxicola lypura (*Hemp. et Ehr.*), *Gray, Hand-l. B.* i. p. 226. no. 3244 (1869).
Saxicola (Cercomela) melanura (*Temm.*), *Blanf. Geol. & Zool. Abyss.* p. 363 (1870).

In the *adult male in breeding-plumage* the general colour of the upper parts is grey; lores and ear-coverts pale brown; quills and wing-coverts greyish brown, the outside webs margined with greyish white; rump and upper tail-coverts black, the latter obscurely margined at the tip with white; tail black; underparts pale grey, shading into nearly white on the axillaries, under wing-coverts, centre of belly, and under tail-coverts. Bill, legs, feet, and claws black. Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary intermediate in length between the sixth and seventh; bastard primary 0·9 to 0·75 inch. Length of wing 3·1 to 2·82 inches, tail 2·5 to 2·3, culmen 0·65 to 0·6, tarsus 0·95 to 0·85.

The *female* differs from the male in being darker in colour, the general colour of the upper parts being brown, and of the underparts brownish white. The *autumn plumage* scarcely differs from that of spring. *Birds of the year* and *young in first plumage* appear to be unknown.

Temminck's Chat-Robin breeds in Southern Palestine, Arabia, Nubia, and Abyssinia. It is said not to be migratory. Its reported occurrence in India is supposed to be an error.

a. ♀ ad. sk.	Zoulla, Annesley Bay, Jan. 28, 1868.	W. T. Blanford, Esq. [C.].
b. ♂ ad. sk.	Mayen, Koomaylee Pass, Jan. 20, 1868.	W. T. Blanford, Esq. [C.].
c. Ad. sk.	Anseba valley, Aug. 18, 1868 (*W. Jesse*).	R. B. Sharpe, Esq.
d. ♂ ad. sk.	Engedi, Palestine, Jan. 22, 1864 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
e. ♂ ad. sk.	Engedi, Palestine.	Canon Tristram [C.].
f. ♀ ad. sk.	Jebel Usdum, Palestine.	Canon Tristram [C.].

8. Myrmecocichla fuscicaudata.

Ruticilla fuscicaudata, *Blanford, Ann. Nat. Hist.* 1869, iv. p. 329; *Blanf. Geol. & Zool. Abyss.* p. 359, pl. iv. (1870).
Saxicola scotocerca, *Heugl. Orn. N.O.-Afr.* i. p. 363 (1869).
Ruticilla scotocerca (*Heugl.*), *Finsch, Tr. Z. S.* vii. p. 324 (1870).

Adult male in breeding-plumage. General colour of the upper parts earthy brown, the outside webs of the wing-coverts and secondaries margined with rufous-brown; a narrow line above the lores and the whole of the underparts, including the axillaries, under wing-coverts, and the inner margin of the quills, pale brown. Bill, legs, and feet dark brown. Wings with the third and fourth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 0·9 inch. Length of wing 2·9 inches, tail 2·2, culmen 0·6, tarsus 0·85.

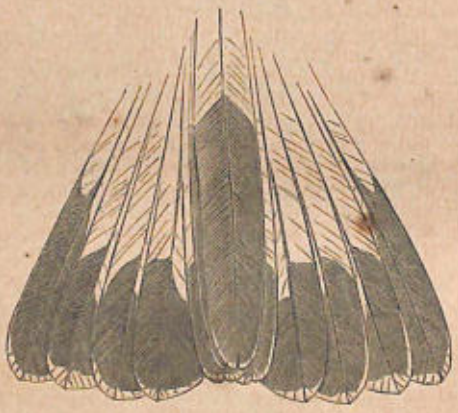
Nothing is known of any differences in the colour of the plumage, which may be attributable to *age*, *sex*, or *season*.

Blanford's Chat-Robin has only occurred in the Bogos country between Nubia and Abyssinia, where it breeds, and is supposed to be a resident.

a. ♂ ad. sk.	Mas'halet Pass, near Bogos, July 13, 1868.	W. T. Blanford, Esq. [C.]. (Type of *Ruticilla fusci-caudata*, Blanf.)	

11. SAXICOLA.

	Types.
Saxicola, *Bechstein, Orn. Taschenb.* p. 216 (1802)	S. œnanthe.
Viliflora, *Leach, Syst. Cat.* p. 21 (1816, *ex Brisson*)....	S. œnanthe.
Œnanthe, *Vieillot, Analyse*, p. 43 (1816)	S. leucura.
Campicola, *Swains. Zool. Journ.* iii. p. 171 (1827)	S. pileata.
Dromolæa, *Cab. Mus. Hein.* i. p. 9 (1850)	S. monticola.
Lucotoa, *Paul de Württ. fide Brehm, Vögelf.* p. 225 (1855)	? S. leucopyga.



Tail of *Saxicola œnanthe*.

The genus *Saxicola* contains thirty or more species of birds, none of them much larger or smaller than a Robin. The bill is slender and black, and only moderately furnished with rictal bristles. The legs are also black, and the tarsus unscutellated. In every species the bastard primary is small, and the wings comparatively flat and pointed. The tail consists of twelve feathers of nearly equal length. The most important character, however, is to be found in the colour of the rump, upper tail-coverts, and the base of the tail, which in typical species is white. One species (*S. xanthoprymna*) is aberrant in the colour of the rump and upper tail-coverts, but is typical in the colour of the tail, whilst three species (*S. mœsta*, *S. chrysopygia*, and *S. galtoni*) are Ruticilline in the colour of the rump, upper tail-coverts, and tail. These species may, however, be distinguished from the genus *Ruticilla* by the proportion between the culmen and tail. In *Ruticilla* the tail is more than four times the length of the culmen, whilst in *Saxicola* it is less.

The Chats are essentially ground-birds, seldom if ever perching

in trees, frequenting the open country, some of them rocky mountain-sides, some cultivated plains, and others arid deserts.

The genus *Saxicola* is principally Æthiopian. Six species are peculiar to South Africa; five more to Nubia and Abyssinia. Five species inhabit North Africa, of which the range of three extends to Palestine, and the remaining two to Turkestan. Eight species are European, of which the range of three extends to Persia, one extends to Turkestan, and two to China. Four species breed only in Persia, and four only in Turkestan.

Key to the Species.

A. Back and throat jet-black in adult male in breeding-plumage.
  a. Upper and median wing-coverts black or dark brown, like the rest of the wing.
    a'. Upper tail-coverts rufous. White on tail frequently tinged with rufous. Belly sometimes white, sometimes black. Head grey or blackish ..... *lugubris*, p. 365.
    b'. Upper tail-coverts white. White on tail never tinged with rufous.
      a''. Lower breast and belly white.
        a'''. Head black.
          a^1. Sexes alike. Length of wing, males 4·2 to 3·9 inches, females 3·95 to 3·75 ..... *albonigra*, p. 366.
          b^1. General colour of female brown. Length of wing, males 3·7 to 3·4 inches, females 3·5 to 3·3 ..... *picata*, p. 367.
        b'''. Head white or grey.
          c^1. Inner margin of quills black or dark brown.
            a^3. Crown grey. Sexes alike. Length of wing 3·7 to 3·5 inches, culmen 0·7 to 0·62. Second primary between the sixth and seventh ..... *capistrata*, p. 368.
            b^3. Head white. General colour of female brown. Length of wing in males 4·2 to 4·0 in., culmen 0·9 to 0·8. *monacha* p. 369.
            c^3. Head white, more or less suffused with grey. General colour of female brown. Length of wing in males 3·9 to 3·6 inches, culmen 0·7 to 0·6. Second primary about equal to the fifth ..... *morio*, p. 372.
          d^1. Inner margin of quills white.
            d^2. Basal portion of quills white on inner webs to the shaft.

a^6. White on nape extending to upper back. Black on outer tail-feathers about half an inch ..... *lugens*, p. 370.

b^6. White on nape not extending to upper back. Black on outer tail-feathers nearly an inch. *lugentoides*, p. 371.

e^5. Inner margin only of quills white ..... *persica*, p. 372.

b''. Breast and belly black.

c.''' Sexes alike. Head of old male white. Length of wing 4·1 to 3·8 inches, culmen 0·93 to 0·7 ..... *leucopyga*, p. 374.

d'''. Sexes different. Head of adult male always black. Length of wing 3·8 to 3·56 inches, culmen 0·8 to 0·7 ..... *leucura*, p. 375.

e'''. Sexes different. Head of adult male always black. Length of wing of male 3·6 inches, culmen 0·68 to 0·65 ..... *opistholeuca*, p. 376.

b. Upper and median wing-coverts white, in strong contrast to the black or dark brown of the rest of the wing.

c'. Head black, except occasionally a narrow white eye-stripe above the lores ..... *monticola*, p. 380.

d'. Head dark grey, with a broad ill-defined paler eye-stripe ..... *monticola leucomelæna*, p. 380.

e'. Head grey ..... *leucomelæna monticola*, p. 379.

f'. Head white ..... *leucomelæna*, p. 377.

B. Back white, grey, or brown. Throat black in adult male in breeding-plumage.

c. Rump and upper tail-coverts buff.

g'. Base of tail-feathers white ..... *xanthoprymna*, p. 381.

h'. Base of tail-feathers pale dull chestnut ..... *mæsta*, p. 382.

d. Rump white.

i'. Back and scapulars uniform buff.

c''. Inner webs of quills narrowly margined with white ..... *deserti*, p. 383.

d''. Basal half of inner webs of most quills white to the shaft ..... *montana*, p. 384.

k'. Back much lighter in colour than the scapulars.

e''. Chin and upper throat black .... *stapazina*, p. 387.

f''. Chin and throat black ..... *melanoleuca*, p. 385.

g''. Chin, throat, and upper breast black ..... *finschii*, p. 388.

C. Throat white or nearly so.

e. Base of tail-feathers chestnut.

l'. Rump, upper tail-coverts, and belly pale buff. Dark brown on tail-feathers more than half an inch. .. *chrysopygia*, p. 389.

m'. Rump and upper tail-coverts chestnut. Belly light brown. Brown on tips of 10 outside tail-feathers less than ½ inch. Centre tail-feathers more than seven eighths inch brown *galtoni*, p. 390.
n'. Upper tail-coverts chestnut. Brown on tips of 10 outside tail-feathers half inch or more. Centre tail-feathers chestnut for the basal half *sennaarensis*, p. 390.
f. Base of tail-feathers white.
o'. Back and scapulars pale slate-grey . *œnanthe*, p. 391.
p'. Back white. Scapulars black .... *aurita*, p. 394.
q'. Back and scapulars black ..... *vittata*, p. 396.
r'. Back and scapulars brown.
h''. Cheeks and breast black ..... *pileata*, p. 397.
i''. Cheeks and breast white or pale brown.
f'''. Outer web of outside tail-feathers white. Dark part of expanded tail V-shaped.
*e*⁴. Upper parts pale buffish brown; underparts white.. *albicans*, p. 398.
*f*⁴. Upper parts earthy brown; underparts brownish white *layardi*, p. 399.
g'''. Terminal third of outside web of outside tail-feathers nearly black. Dark part of expanded tail T-shaped.
*g*⁴. Upper parts sometimes sandy brown, sometimes dull brown ..... *isabellina*, p. 399.
*h*⁴. Upper parts dark brown, paler on the margin of each feather..... *bottæ*, p. 401.

1. Saxicola lugubris.

Saxicola lugubris, *Rüpp. Neue Wirb. Vög.* p. 77, pl. 28. fig. 1 (*circ.* 1835); *id. Syst. Uebers.* p. 58 (1845); *Gray, Gen. B.* i. p. 179 (1846); *Cab. Mus. Hein.* i. p. 10 (1850); *Heugl. Syst. Uebers.* p. 26 (1856); *Gray, Hand-l. B.* i. p. 225. no. 3215 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 354 (1869); *Blanf. & Dresser, P. Z. S.* 1874, p. 231.
Saxicola leucuroides, *Guér. Rev. Zool.* 1843, p. 162; *Guér. et Lafresn. Ferr. et Gal. Voy. en Abyss.* iii. p. 218, *Atlas, Zool.* pl. xi. (1847); *Heugl. Orn. N.O.-Afr.* i. p. 358 (1869); *Gray, Hand-l. B.* i. p. 225. no. 3233 (1869).
? Saxicola syenitica, *Heugl. Orn. N.O.-Afr.* i. p. 358 (1869); *Shelley, B. Egypt*, p. 80 (1872).
Saxicola brehmii, *Salvad. Att. Ac. Tor.* v. p. 508 (1870).

Adult male in breeding-plumage. General colour black; forehead, crown, and nape grey, with obscure dark centres to each feather; quills dark brown, slightly paler on the under surface; rump, upper and under tail-coverts, and the tips of the feathers round the vent buff; basal third of two centre tail-feathers and basal two thirds of the others white, more or less suffused with buff. Bill, legs, feet,

and claws black. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary slightly longer or shorter than the seventh, bastard primary 0·95 to 0·8 inch. Length of wing 3·34 to 3·2 inches (females 3·1 to 3·0), tail 2·35 to 2·1, culmen 0·77 to 0·65, tarsus 0·98 to 0·88.

After the autumn moult the black parts are glossy, the dark centres to the feathers on the crown very pronounced, and the tail-feathers have white tips. The *female* has the upper parts similar to the male, except that the black is duller and browner, and the head concolorous with the back. The ground-colour of the under-parts is a buffish brown on the breast, shading into pale grey on the belly and throat, and into dull buff on the under tail-coverts, the feathers of the throat, breast, and flanks having dark brown centres. What I suppose to be *males of the year* have nearly white bellies. *Young in first plumage* appear to be unknown.

The Abyssinian Chat is confined to the highlands of Abyssinia, where it is supposed to be a resident.

a. Ad. st.	Abyssinia.	Baron Laugier.
b, *c*. ♂ ad. sk.	Abyssinia.	R. B. Sharpe, Esq.
d. ♂ ad. sk.	Halai, Tigré, March 3, 1868.	W. T. Blanford, Esq. [C.].
e. ♀ ad. sk.	Senafé, Tigré, March 12, 1868.	W. T. Blanford, Esq. [C.].
f, *g*. ♂ ♀ ad. sk.	Senafé, May 28, 1868.	W. T. Blanford, Esq. [C.].

2. Saxicola albonigra.

Saxicola alboniger, *Hume*, *Stray Feath.* i. p. 2 (1873).
Dromolaea alboniger (*Hume*), *Hume*, *Stray Feath.* i. p. 185 (1873).
Saxicola albonigra, *Hume*, *Blanf. & Dresser*, *P. Z. S.* 1874, p. 226; *Blanf. East. Persia*, ii. p. 153, pl. xi. (1876).

Adult male in breeding-plumage. Entire head, neck, upper back, throat, axillaries, and under wing-coverts black; quills dark brown, slightly paler on the under surface; lower back, rump, upper tail-coverts, breast, belly, and under tail-coverts white; tail-feathers white, except the terminal half of the two central feathers and the terminal half inch of the others, which are dark brown. Bill, legs, feet, and claws black. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal in length to the sixth, bastard primary 1·05 to 0·85 inch. Length of wing 4·2 to 3·9 inches (female 3·95 to 3·75), tail 3·0 to 2·65, culmen 0·87 to 0·75, tarsus 1·13 to 1·0.

It is not known that the plumage of the *female* differs in any respect from that of the male. No change takes place *after the autumn moult* beyond the greater brilliancy of the colours. *Young in first plumage* and *birds of the year* are said to have the black more sooty in tinge, and to be spotted only at the tips of the wing-coverts and quills.

So far as is known, Hume's Chat is confined to South-eastern Persia, Baluchistan, and Scinde, where it appears to be a resident,

breeding at an elevation of five or six thousand feet, and resorting to the lower valleys in winter.

a. ♀ ad. sk.	Karmán, S.E. Persia, 5800, May 10, 1872.	W. T. Blanford, Esq. [C.].
b. ♂ ad. sk.	Nari Nai, Khirthan range, Scinde, Jan. 9, 1876.	W. T. Blanford, Esq. [P.].
c. ♀ ad. sk.	Gaj river, Western Scinde, Dec. 26, 1876.	W. T. Blanford, Esq. [P.].

Saxicola picata and Saxicola capistrata.

Between these two forms every intermediate variety occurs. The extreme forms only differ in the colour of the crown of the head and nape: in the former it is jet-black, in the latter nearly pure white. Hume is of opinion that the white-headed bird is the fully adult bird of the black-headed species. In this opinion Dr. Scully, who, during his residence in Gilgit, obtained a magnificent series of intermediate forms, concurs. Blanford, who also obtained a fine series of intermediate forms in Scinde and Rajputana, is of opinion that the two forms are distinct species, and that the intermediate forms are the immature white-headed birds. The question must, in my opinion, remain an open one until further facts are collected; but I think that the balance of evidence points to the conclusion that the two forms are only subspecifically distinct, and that the intermediate forms are fertile hybrids. The facts upon which I base my hypothesis are as follows:—There is no evidence that one form moults into the other, intermediate forms of every grade occurring in mid-winter. The black-headed form is by far the most numerous; the intermediate forms are rare; and the white-headed form is said to be still rarer,—which is precisely the case with the Carrion and Hooded Crows and their intermediate forms in the valley of the Yenesay. The geographical distribution of the two forms is almost identical; but it is suspected that the black-headed form alone occurs in some parts of Persia and Baluchistan, and the white-headed form alone in Turkestan.

3. Saxicola picata.

Saxicola picata, *Blyth, J. A. S. Beng.* xvi. p. 131 (1847); *id. Cat. B. Mus. As. Soc.* p. 167 (1849); *Bp. Consp.* i. p. 304 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 287 (1854); *Jerd. B. Ind.* ii. p. 131 (1863); *Gray, Hand-l. B.* i. p. 226. no. 3251 (1869); *Blanf. & Dresser, P. Z. S.* 1874, p. 227; *Blanf. East. Persia,* ii. p. 153 (1876).

Dromolæa picata (*Blyth*), *Gould, B. Asia,* pt. xvii. (1865).

Adult male in breeding-plumage. Entire head, neck, back, throat, axillaries, and under wing-coverts black; rump and upper tail-coverts, lower breast, and belly white; quills dark brown, slightly paler on the under surface; under tail-coverts white, more or less suffused with buff; tail-feathers white, the two central feathers black for the terminal half, and the remainder tipped with dark brown from one eighth to half an inch. Bill, legs, feet, and claws

black. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·9 to 0·75 inch. Length of wing 3·7 to 3·4 inches (females 3·5 to 3·3), tail 2·7 to 2·45, culmen 0·7 to 0·6, tarsus 1·0 to 0·86.

Adult female in breeding-plumage. General colour earthy brown, slightly paler on the margins of the quills and wing-coverts, the chin, upper throat, and breast, shading into nearly white on the belly, and more or less suffused with buff on the under tail-coverts; rump and tail as in the male, except that the white is occasionally slightly suffused with buff, and the dark brown is not so dark. *After the autumn moult* no change in the appearance of the plumage occurs, except that the colours are richer and deeper. *Birds of the year* appear to be unknown. *Young in first plumage* resemble the female, but have obscure pale centres and dark margins to the feathers of the head, back, throat, and breast; the margins to the innermost secondaries and the tips of the quills and tail-feathers are broad and pale isabelline brown.

The Pied Chat breeds in the highlands of Southern Persia and South Afghanistan, wintering in Baluchistan, Scinde, and North-west India.

a. ♂ ad. st.	India.	Purchased.
b. ♂ ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
c, d. ♂ ♀ ad. sk.	Scinde (*Dr. Gould*).	India Museum.
e. ♂ ad. sk.	Scinde.	W. T. Blanford, Esq. [P.].
f. ♀ ad. sk.	Nanshabro District, Scinde, Jan. 7, 1876.	W. T. Blanford, Esq. [P.].
g, h, i. ♂ ad. sk.	Afghanistan (*Griffith*).	India Museum.
k. ♂ ad. sk.	Bampusht, Baluchistan, Feb. 28, 1872.	W. T. Blanford, Esq. [C.].
l. ♂ ad. sk.	Bampusht, Mar. 5, 1872.	W. T. Blanford, Esq. [C.].
m. ♂ juv. sk.	Sis-i-jum, S.W. of Kamian, S. Persia, 6500 feet.	W. T. Blanford, Esq. [C.].

4. Saxicola capistrata.

Saxicola leucomela (*Pall.*), *apud Blyth, J. A. S. Beng.* xvi. p. 131 (1847); *apud Blyth, Cat. B. Mus. As. Soc.* p. 167 (1849); *apud Jerd. B. Ind.* ii. p. 131 (1863); *apud Dresser, Ibis* 1875, p. 336.

Saxicola capistrata, *Gould, B. Asia*, pt. xvii. (1865); *Gray, Hand-l. B.* i. p. 224. no. 3209 (1869).

Saxicola lugens, *Licht. apud Severtz. Turkest. Jevotn.* p. 65 (1873).

Saxicola morio, *Hempr. et Ehr. apud Blanf. & Dresser, P. Z. S.* 1874, p. 225 (*partim*); *apud Dresser, B. Eur.* pt. xxvii. (1874, *partim*); *apud Severtz. Stray Feath.* iii. p. 429 (1875).

Adult male in breeding-plumage. Head and nape greyish white, shading into white on the hind neck and eye-stripes; lores, chin, throat, ear-coverts, sides of neck, scapulars, back, wing-coverts, axillaries, and under wing-coverts black; quills dark brown, slightly paler on the under surface; rump, upper tail-coverts, breast, flanks, belly, and under tail-coverts white, the latter occasionally suffused with buff; tail white, the two central feathers nearly black for the terminal half, and the remainder tipped with nearly black from a quarter to half an inch. Bill, legs, feet, and claws black. Wings

with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 0·9 to 0·7 inch. Length of wing 3·7 to 3·5 inches, tail 2·7 to 2·4, culmen 0·7 to 0·62, tarsus 1·1 to 0·9.

The *female* of this species, strange to say, is unknown; it has probably been confounded with the female of *S. picata*, which may possibly be indistinguishable from it. *After the autumn moult* the crown of the head is somewhat greyer. *Birds of the year* and *young in first plumage* appear to be unknown.

The Indian Chat breeds in the cultivated districts of Turkestan, and winters in North-west and Central India, occasionally straying into Scinde.

a. ♂ ad. sk.	India.	Capt. Boys [P.].
b, *c*. ♂ ad. sk.	Afghanistan (*Griffith*).	India Museum.
d, *e*. ♂ ad. ak.	Afghanistan (*Griffith*).	India Museum.

5. Saxicola monacha.

Saxicola monacha, *Rüpp. fide Temm. Pl. Col.* no. 359, fig. 1 (1825, ♂); *id. Neue Wirb., Vög.* p. 79 (1835); *id. Syst. Uebers.* p. 58 (1845); *Gray, Gen. B.* i. p. 179 (1846); *Heugl. Syst. Uebers.* p. 26 (1856); *Gray, Hand-l. B.* i. p. 226. no. 3252 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 356 (1869); *Shelley, B. Egypt*, p. 78, pl. ii. (1872); *Sharpe & Dresser, B. Eur.* pt. xvi. (1873); *Blanf. & Dresser, P. Z. S.* 1874, p. 227; *Blanf. East. Pers.* ii. p. 150 (1876).

Saxicola pallida, *Rüpp. fide Cretzschm. Rüpp. Atlas*, pl. xxxiv. (1826, ♀); *id. Neue Wirb., Vög.* p. 80 (1835); *id. Syst. Uebers.* p. 58 (1845); *Heugl. Syst. Uebers.* p. 26 (1856); *Gray, Hand-l. B.* i. p. 224. no. 3213 (1869).

Dromolæa monacha (*Rüpp.*), *Bp. Consp.* i. p. 302 (1850); *Cab. Mus. Hein.* i. p. 9 (1850); *Hume, Stray Feath.* 1873, p. 186.

Saxicola gracilis, *Licht. Nomencl. Av.* p. 35 (1854).

Adult male in breeding-plumage. Head and nape white; lores, the feathers immediately above and behind the eye, ear-coverts, back, scapulars, wing-coverts, chin, throat, breast, axillaries, and under wing-coverts black; quills dark brown, almost black, slightly paler on the under surface; rump, upper tail-coverts, belly, flanks, and under tail-coverts white; tail white, except the terminal half of the two central tail-feathers and an occasional brown spot near the tip of some of the others. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and longest, second primary about equal to the fifth, bastard primary 0·8 to 0·75 inch. Length of wing 4·2 to 4·0 inches (females 4·0 to 3·85), tail 2·95 to 2·75, culmen 0·9 to 0·8, tarsus 0·91 to 0·89.

Adult female in breeding-plumage. General colour of the upper parts buffish brown; wings and wing-coverts brown, the outer webs margined with buffish brown; rump and upper tail-coverts white, suffused with buff; tail-feathers white, suffused with buff, except the terminal two thirds of the two central feathers, which are brown, and a brown terminal band on the others, varying from one eighth of an inch on the subcentral feathers to half an inch on the outside feathers; the whole of the underparts are pale buffish brown,

slightly darker on the breast and flanks. There appears to be no *seasonal change* in the plumage of this species. *Males of the year* have the black parts browner, with narrow pale edges to the feathers, and the white parts are more or less suffused with buff. *Young in first plumage* appear to be unknown.

The Hooded Chat is found in Egypt, Nubia, Palestine, and Baluchistan. It is said to be resident.

a. ♂ ad. sk.	Nubia (*Verreaux*).	R. B. Sharpe, Esq.
b. ♀ ad. sk.	Wadi el Arabi, Nubia.	Dr. Leith Adams [P.].
c. ♂ ad. sk.	Jebel Usdum, Palestine.	Canon Tristram [C.].
d. ♀ ad. sk.	Bahu Kelat, Persian Baluchistan, Feb. 21, 1872.	W. T. Blanford, Esq. [C.].
e. ♂ ad. sk.	Gwâdar, Baluchistan, Jan. 2, 1872.	W. T. Blanford, Esq. [C.].

6. Saxicola lugens.

Saxicola lugens, *Licht. Verz. Doubl.* p. 33 (1823); *Rüpp. Neue Wirb., Vög.* p. 79 (1835); *id. Syst. Uebers.* p. 58 (1845); *Gray, Gen. B.* i. p. 179 (1846); *Bp. Consp.* i. p. 303 (1850); *Heugl. Syst. Uebers.* p. 26 (1856); *Loche, Expl. Sci. Algér., Ois.* i. p. 207 (1867); *Tristram, Ibis*, 1867, p. 95; *Heugl. Orn. N.O.-Afr.* p. 351 (1869); *Gray, Hand-l. B.* i. p. 224. no. 3210 (1869); *Shelley, B. Egypt*, p. 77 (1872).

Saxicola erythræa, *Hempr. et Ehr. Symb. Phys. Aves*, fol. cc (1833); *Dresser & Blanford, Ibis*, 1874, p. 341; *Blanford & Dresser, P. Z. S.* 1874, p. 222 (*partim*); *Dresser, B. Eur.* pt. xxv. (1874, *partim*); *J. H. Gurney, jun., Ibis*, 1875, p. 140.

Saxicola halophila, *Tristram, Ibis*, 1859, pp. 59, 301; *id. Ibis*, 1867, p. 95.

Saxicola homochroa, *Tristram, apud J. H. Gurney, jun., Ibis*, 1871, p. 81.

Saxicola leucomela (*Pall.*), *apud Hume, Stray Feath.* 1873, p. 185; *apud Blanf. & Dress. P. Z. S.* 1874, p. 225; *apud Dresser, B. Eur.* pt. xxvii. (1874).

Bill of *Saxicola lugens*.

Adult male in breeding-plumage. Head, nape, and hind neck white, more or less suffused with grey; lores, chin, throat, ear-coverts, sides of neck, scapulars, back, wing-coverts, axillaries, and under wing-coverts black; rump, upper tail-coverts, breast, flanks, and belly white; under tail-coverts buff; tail white, the two central feathers black for the terminal half, and the remainder tipped with black from a quarter to half an inch; quills dark brown, slightly paler on the under surface; basal half of primaries and basal three fourths of secondaries white on inner web to the shaft. Bill, legs, feet, and claws black. Wings with the third and fourth primaries

nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·8 to 0·7 inch. Length of wing 3·8 to 3·3 inches, tail 2·65 to 2·35, culmen 0·75 to 0·65, tarsus 1·1 to 1·0.

Adult female in breeding-plumage. General colour of the upper parts pale brownish grey, darkest on the scapulars, and suffused with isabelline on the head and nape; lores, ear-coverts, and cheeks grey; eye-stripe nearly white, extending to the nape; wings and wing-coverts dark brown; rump and upper tail-coverts white; tail white, except the terminal three fifths of the two centre feathers and the terminal fourth of the others, which are dark brown. The whole of the underparts are nearly white, with a buff tinge on the under tail-coverts; axillaries and under wing-coverts grey; inner margin of quills white, at the base extending to the shaft. *Males of the year* resemble the female, but have the lores, ear-coverts, and cheeks nearly black, and the throat varying from grey to nearly black. Both *males* and *females of the year* have pale tips to the quills and tail-feathers. *Young in first plumage* appear to be unknown. (The nestling figured in Dresser's 'Birds of Europe' is not that of this species, but that of *Saxicola morio*.) It is alleged that old females acquire the plumage of the adult male; but this statement requires verification.

The White Under-winged Pied Chat is a resident in Algeria, Egypt, Arabia, and Palestine, and is occasionally found in Nubia.

a, *b*. ♂ ad. sk.	Algeria.	R. B. Sharpe, Esq.
c. Ad. sk.	Hadjera, Algeria, Dec. 23, 1856 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
d. Ad. sk.	Egypt.	Sir S. Baker [P.].
e. Ad. sk.	Nubia.	Dr. Leith Adams [P.].
f. Ad. sk.	Fifth Cataract of the Nile.	F. Galton, Esq. [P.].
g. ♂ ad. sk.	Near Engedi, Palestine.	Canon Tristram [C.].

7. Saxicola lugentoides.

This is an excellent species, which has been most unaccountably and undeservedly overlooked by the French ornithologists, and by Messrs. Blanford and Dresser, when they examined the most interesting series of Chats in the Museum of the Jardin des Plantes. It is nearly allied to the preceding, but differs from it in the following particulars:—The white on the head is more suffused with grey, and ends abruptly on the nape, and the white on the rump is less developed, causing the black on the back to extend nearly twice the distance that it does in the northern species. The upper tail-coverts are slightly tinged with buff: the buff on the under tail-coverts is much deeper in colour, approaching chestnut: the two centre tail-feathers are black for the terminal two thirds of their length, and the black tips to the remaining tail-feathers extend three quarters of an inch or more. Bill, legs, feet, and claws black. Wings with the third, fourth, and fifth primaries nearly equal and longest. Second primary intermediate in length between the sixth and seventh; bastard primary 0·9 to 0·8 inch. Length of wing 3·6 to

3·45 inches (female 3·4), tail 2·5 to 2·3, culmen 0·8 to 0·75, tarsus 1·05 to 0·95.

Adult female in breeding-plumage. Rump, tail, and tail-coverts, both upper and under, as in the male, except that the black on the tail is replaced by dark brown. The rest of the upper parts are darkish brown, and the rest of the underparts are pale brown, with traces of darker centres to some of the feathers of the breast, which may be the remains of immature plumage. The basal portions of the inner margin of the quills are nearly white. *Birds of the year* and *young in first plumage* are unknown.

Botta's Chat breeds in Sennaar, North-east Africa, where it is supposed to be a resident.

The British Museum does not possess an example of this species. The types from which the above descriptions are taken are in the Museum of the Jardin des Plantes in Paris, and were collected by M. Botta in 1839. An adult male from the same collection is in my possession, for which I am indebted to the kindness of Prof. Alphonse Milne-Edwards.

8. Saxicola persica.

Saxicola leucomela (*Pall.*), *apud Filippi, Viagg. Pers.* p. 347 (1865), *apud Blanf. & Dresser, P. Z. S.* 1874, p. 225 (*partim*), *apud Dresser, B. Eur.* pt. xxvii. (1874, *partim*), *apud Blanf. East. Pers.* ii. p. 152 (1876).

Saxicola monacha, *Rüpp. apud Severtz. Turkest. Jevotn.* p. 65 (1873), *apud Dresser, Ibis*, 1875, p. 336 (*conf. Severtz. Str. Feath.* 1875, p. 429).

This species differs from the two preceding ones in having the inner margin of the quills only narrowly edged with white. Length of wing 3·71 inches; tail 2·6; culmen 0·68; tarsus 1·0. Wing-formula the same as in *S. lugens*.

a. ♂ ad. sk. Shiraz, Persia, 500 ft., June 13, 1869. W. T. Blanford, Esq. [C.].

9. Saxicola morio *.

Motacilla pleschanka, *Lepech. Nov. Com. Petr.* xix. p. 503, pl. xxiv. fig. 2 (1770).

Motacilla leucomela, *Pallas, Nov. Com. Petr.* xiv. p. 584, pl. xxii. fig. 3 (1770); *Gmel. Syst. Nat.* i. p. 974 (1788); *Pallas, Zoogr. Rosso-Asiat.* i. p. 479 (1811, *descr. mal.*).

Muscicapa leucomela (*Pall.*), *Lath. Ind. Orn.* ii. p. 469 (1790).

Sylvia leucomela (*Pall.*), *Temm. Man. d'Orn.* p. 138 (1815).

Œnanthe pleschanka (*Lepech.*), *Vieill. N. Dict. d'Hist. Nat.* xxi. p. 423 (1818).

Saxicola leucomela (*Pall.*), *Temm. Man. d'Orn.* i. p. 243 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 100 (1822); *Temm. Pl. Col.* no. 257. fig. 3 (1824); *Gould, B. Eur.* ii. pl. 89 (1837); *Keys. u. Blas. Wirb. Eur.* pp. lx, 193 (1840); *Nordm. in Démid. Voy. Russ. mérid.* iii. p. 131 (1840); *Gray, Gen. B.* i. p. 178 (1846);

* Since the name of *Saxicola morio* has only been misapplied by Blanford and Dresser, and possibly by Severtzoff, it seems better to retain it rather than to adopt the unknown name of *Saxicola pleschanka*, which would stand according to the British-Association rules.

Degl. Orn. Eur. i. p. 490 (1849); *Bp. Consp.* i. p. 303 (1850); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 287 (1854); *Lindem. Vög. Griechenl.* p. 111 (1860); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 457 (1867); *Heugl. Orn. N.O.-Afr.* i. p. 350 (1869); *Gray, Hand-l. B.* i. p. 224. no. 3208 (1869); *Fritsch, Vög. Eur.* p. 195 (1870); *Salvad. Faun. Ital. Ucc.* p. 87 (1871); *Swinh. P. Z. S.* 1871, p. 360; *Severtz. Turkest. Jevotn.* p. 65 (1873); *Dresser, Ibis*, 1875, p. 333; *Severtz. Str. Feath.* 1875, p. 429; *Bogd. B. Cauc.* p. 93 (1879); *Müller, Journ. Orn.* 1879, p. 388.

Vitiflora leucomela (*Pall.*), *Boie, Isis*, 1822, p. 552; *Bp. Comp. List B. Eur. & N. Amer.* p. 16 (1838).

Saxicola morio, *Hempr. et Ehr. Symb. Phys.* fol. aa (1833); *Dresser, B. Eur.* pt. xxvii. (1874, *partim*); *Dresser & Blanf. Ibis*, 1874, p. 338; *Blanf. & Dress. P. Z. S.* 1874, p. 225 (*partim*); *Dresser, Ibis*, 1875, p. 336; *Blanford, East. Pers.* ii. p. 152 (1876); *Taez. Bull. Soc. Zool. France*, p. 144 (1876); *Prjev. Rowley's Orn. Misc.* ii. p. 183 (1877); *David et Oust. Ois. Chine*, p. 166 (1877); *Finsch, Verh. zool.-bot. Gesellsch. Wien*, 1879, p. 164; *Wardlaw Ramsay, Ibis*, 1880, p. 55.

Saxicola atricollis, *Von Müll. Naum.* 1851, iv. p. 28; *Von Müll. Beitr. Orn. Afr.* pl. iv. (1853).

Saxicola leucura (*Gm.*), *apud Linderm. Vog. Griechenl.* p. 112 (1860); *apud Radde, Reis. Sibir., Vög.* p. 246 (1863).

Saxicola salina, *Eversm.* ♂, *apud Loche, Expl. Sci. Algér., Ois.* i. p. 210 (1867.)

Saxicola hendersoni, *Hume, Ibis*, 1871, p. 408; *Hume & Henders. Lahore to Yark.* p. 205, pl. xiii. (1873).

Saxicola talas, *Severtz. Turkest. Jevotn.* pp. 65, 119, pl. viii. figs. 1, 3, & 4 (1873, *autumn plumage*); *Severtz. Str. Feath.* 1875, p. 429.

Saxicola melanoleuca, *Hemp. et Ehr. apud Dresser, Ibis*, 1875, p. 336.

Adult male in breeding-plumage. Head, nape, and hind neck white, more or less suffused with grey; lores, chin, throat, ear-coverts, sides of neck, scapulars, back, wing-coverts, axillaries, and under wing-coverts black; quills dark brown, slightly paler on the under surface; rump, upper tail-coverts, breast, flanks, belly, and under tail-coverts white; tail white, the two central feathers nearly black for the terminal half, and the remainder tipped with nearly black from a quarter to half an inch. Bill, legs, feet, and claws black. Wings with the third and fourth primaries nearly equal and longest, second primary about equal to the fifth, bastard primary 0·8 to 0·6 inch. Length of wing 3·9 to 3·6 inches (female 3·6 to 3·45), tail 2·66 to 2·25, culmen 0·7 to 0·6, tarsus 1·0 to 0·85.

Adult female in breeding-plumage. The belly, rump, upper tail-coverts, under tail-coverts, and tail are the same as in the male; the remainder of the upper parts are earthy brown. The same colour prevails on the underparts from the breast upwards, showing the black bases to the feathers on the throat. *After the autumn moult* the white feathers on the head, nape, breast, belly, and under tail-coverts of the male have brown edges, and all the black feathers are more or less edged with brown. Exactly the same change takes place in the female, the edges to the new feathers being paler than the centres, especially on the wing-coverts, innermost secondaries, and tips of the primaries.

Birds of the year resemble adults after the autumn moult, but have broader pale edges and tips to the quills and tail-feathers. *Young in first plumage* have the same characters, but have dark terminal bars and pale centres to the feathers of the back and breast.

The Siberian Pied Chat breeds in Cyprus, the Crimea, the Caucasus, the lower valley of the Volga, Persia, Afghanistan, Turkestan, Western Thibet, Mongolia, South-eastern Siberia, and North-west China. It has been found on migration in Palestine and Egypt, and winters in Abyssinia and Arabia, and probably in South-west China. Its occurrence in Algeria requires verification.

a. ♂ ad. sk.	Caspian.	Purchased.
b. ♂ ad. sk.	Saisan, Central Asia, May 30, 1876.	Dr. O. Finsch [C.].
c, *d*. ♂, *e*. ♀ ad. sk.	Koshiak, Yarkand, Sept. 10, 1870.	Dr. G. Henderson [C.]. (Types of *S. hendersoni*, Hume.)
f. ♂ ad. sk.	Mohammerah.	K. Loftus, Esq. [P.].
g. ♀ ad. sk.	Rayrayguddy, Abyssinia, Feb. 22, 1868.	W. T. Blanford, Esq. [C.].
h. ♂ ad. sk.	Senafé, Tigré, Feb. 28, 1868.	W. T. Blanford, Esq. [C.].
i, *k*. ♂ ♀ ad. sk.	Senafé, Tigré, March 1868.	W. T. Blanford, Esq. [C.].
l. ♂ ad. sk.	Adigrat, Tigré, March 30, 1868.	W. T. Blanford, Esq. [C.].
m. ♀ ad. sk.	Halai, Tigré, March 2, 1868.	W. T. Blanford, Esq. [C.].
n, *o*. ♀ ad. sk.	Kashgar (*Dr. Bellew*).	India Museum.
p. ♂ ad. sk.	Gilgit, Cashmere, May 2, 1879.	Dr. J. Scully [P.].
q. ♀ ad. sk.	Gilgit, Cashmere, Oct. 22, 1879.	Dr. J. Scully [P.].

10. Saxicola leucopyga.

Saxicola leucura, *Gmel. apud Licht. Verz. Doubl.* p. 32 (1823); *apud Hempr. et Ehr. Symb. Phys. Aves*, fols. aa, cc, dd (1833); *apud Rüpp. Neue Wirb., Vög.* p. 79 (1835); *apud Rüpp. Syst. Uebers.* p. 58 (1845); *apud Heugl. Syst. Uebers.* p. 26 (1856).

Dromolæa cursoria (*Vieill.*), *apud Bp. Consp.* i. p. 302 (1850); *apud Cab. Mus. Hein.* i. p. 9 (1850).

Vitiflora leucopygia, *Brehm, Vogelfang*, p. 225 (1855).

Vitiflora leucuros, *Brehm, Vogelfang*, p. 225 (1855, *partim*).

Lucotoa leucopyga, *Brehm, Paul v. Württ. fide Brehm, Vogelfang*, p. 225 (1855).

Saxicola cachinnans, *Temm. apud Brehm, Journ. Orn.* 1856, p. 395; *apud Heugl. Journ. Orn.* 1865, p. 44.

Dromolæa (Lutucoa) leucocephala, *Brehm, Journ. Orn.* 1858, p. 62.

Dromolæa (Lutucoa) leucopygaia, *Paul de Württ. fide Brehm, Journ. Orn.* 1858, p. 66.

Dromolæa leucopygia (*Brehm*), *Tristram, Ibis*, 1859, p. 297.

Dromolæa monacha (*Rüpp.*), *apud Loche, Expl. Sci. Algér., Ois.* i. p. 199 (1867).

Dromolæa nigra (*Vieill.*), *apud Loche, Expl. Sci. Algér., Ois.* i. p. 200 (1867).

Saxicola leucopygia (*Brehm*), *Gray, Hand-l. B.* i. p. 226. no. 3253 (1869); *Shelley, Ibis*, 1871, p. 53; *Shelley, B. Egypt*, p. 79 (1872).

Saxicola leucocephala (*Brehm*), *Gray, Hand-l. B.* i. p. 226. no. 3254 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 359 (1869).
Saxicola leucopyga (*Brehm*), *Blanf. & Dresser, P. Z. S.* 1874, p. 228; *Dresser, B. Eur.* pt. xxiv. (1873).

Adult male in breeding-plumage. Head and nape white; a narrow frontal line at the base of the bill; lores, the feathers above and behind the eye, ear-coverts, back, scapulars, wing-coverts, chin, throat, breast, belly, axillaries, under wing-coverts, and flanks black; quills dark brown, slightly paler on the under surface; rump, upper tail-coverts, the feathers round the vent, and under tail-coverts white; tail white, except the terminal half of the two centre feathers and an occasional spot on or near the tip of the others, which are brown. Bill, legs, feet, and claws black. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary slightly longer or slightly shorter than the sixth, bastard primary 0·95 to 0·8 inch. Length of wing 4·1 to 3·8 inches, tail 2·85 to 2·5, culmen 0·93 to 0·7, tarsus 1·05 to 1·0.

It is not known that the *female* differs in any respect from the male. Immediately *after the autumn moult* the black parts are very rich and glossy. *Birds of the year*, and possibly *females*, have black heads and pale tips to the primary-coverts and the secondaries. Birds in intermediate plumage, with black heads interspersed with a few white feathers, or with white heads interspersed with a few black feathers, occasionally occur. The length of bill is subject to great variation. In what I take to be very old males white feathers appear on the shoulder. *Young in first plumage* resemble birds of the year, but are of a duller black colour, and have obscure pale tips to the greater wing-coverts as well as to the primary wing-coverts and secondaries, and have also white tips to all the tail-feathers.

The White-rumped Chat appears to be a resident in Eastern Algeria, Egypt, Nubia, Arabia, and Palestine.

a. Ad. sk.	Wed Nça, Algeria, Dec. 10, 1856 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
b. Ad. sk.	Egypt.	J.H. Gurney, Esq., Jun. [P.].
c. Ad. sk.	Second Cataract of the Nile.	Dr. Leith Adams [P.].
d. ♂ ad. sk.	Jebel Usdum, Palestine.	Canon Tristram [C.].

11. Saxicola leucura.

White-tailed Thrush, *Lath. Gen. Syn.* ii. pt. 1, p. 40 (1783).
Turdus leucurus, *Gmel. Syst. Nat.* i. p. 820 (1788, *ex Lath.*); *Lath. Ind. Orn.* i. p. 344 (1790).
Œnanthe leucura (*Gmel.*), *Vieill. N. Dict. d'Hist. Nat.* xxi. p. 422 (1818).
Saxicola cachinnans, *Temm. Man. d'Orn.* i. p. 236 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 97 (1822); *Gould, B. Eur.* ii. pl. 88 (1837).
Vitiflora leucura (*Gmel.*), *Boie, Isis*, 1822, p. 522.
Saxicola leucura (*Gmel.*), *Keys. u. Blas. Wirb. Eur.* pp. lx, 193 (1840); *Gray, Gen. B.* i. p. 179 (1846); *Degl. Orn. Eur.* i. p. 491 (1849); *Dubois, Ois. Eur.* pl. liv. (1862); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Degl. et Gerbe, Orn. Eur.* i. p. 459 (1867);

Doderl. Avif. Sicil. p. 112 (1869); *Gray, Hand-l. B.* i. p. 226. no. 3250 (1869); *Fritsch, Vög. Eur.* p. 195 (1870); *Salvad. Faun. Ital. Ucc.* p. 87 (1871); *Dresser, B. Eur.* pt. xxiv. (1873); *Blanf. & Dresser, P. Z. S.* 1874, p. 228.

Dromolæa leucura (*Gml.*), *Bp. Consp.* i. p. 303 (1850); *Cab. Mus. Hein.* i. p. 9 (1850); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 221 (1859); *Hartl. Orn. W.-Afr.* p. 65 (1857); *Loche, Expl. Sci. Algér. Ois.* i. p. 197 (1867); *Irby, B. Gibr.* p. 79 (1875).

Vitiflora leucuros (*Gmel.*), *Brehm, Vogelf.* p. 225 (1855).

Adult male in breeding-plumage. General colour black; quills dark brown, paler on the under surface; rump, upper and under tail-coverts white: tail white, except the terminal half of the two centre feathers and the tips from a quarter to half an inch of the others, which are dark brown. Bill, legs, feet, and claws black. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·02 to 0·85 inch. Length of wing 3·8 to 3·56 inches, tail 2·6 to 2·5, culmen 0·8 to 0·7, tarsus 1·05 to 1·01.

There appears to be no *seasonal* change of plumage in this species. The *female* differs from the male in having the black parts dark brown, and in having the white parts slightly suffused with buff. *Birds of the year* probably scarcely differ from the adult. *Young in first plumage* differ from the female only in having obscure pale terminal spots on the greater wing-coverts and innermost secondaries, and in having the quills narrowly margined with pale brown, and the tail-feathers tipped with white.

The Black Chat breeds in South-western Europe, occasionally straggling as far east as Greece. A few remain to winter, but the majority migrate to Algiers.

a. Ad. sk.	Algeria (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
b. Ad. sk.	Sahara.	Purchased.

12. Saxicola opistholeuca.

Saxicola leucura, *Gmel. apud Blyth, J. A. S. Beng.* xvi. p. 131 (1847).

Saxicola opistholeuca, *Strickland, Jard. Contr. Orn.* 1849, p. 60; *Blyth, Cat. B. Mus. As. Soc.* p. 167 (1849); *Gray, Hand-l. B.* i. p. 226. no. 3255 (1869); *Blanf. & Dresser, P. Z. S.* 1874, p. 229.

Dromolæa opistholeuca (*Strickl.*), *Bp. Consp.* i. p. 303 (1850); *Gould, B. Asia*, pt. xvii. (1865).

Saxicola leucuroides, *Guér. apud Jerd. B. Ind.* ii. p. 130 (1863).

Saxicola syenitica, *Heugl. apud Severtz. Turkest. Jevotn.* p. 65 (1873, *comp. Severtz. Stray Feath.* 1875, p. 429).

Saxicola leucopyga (*Brehm*)?, *Dresser, Ibis*, 1875, p. 337.

Adult male in breeding-plumage. General colour black; quills dark brown, slightly paler on the under surface; rump, upper tail-coverts, feathers round the vent, and under tail-coverts white; tail white, except the terminal half of the two centre feathers and the tips from a quarter to half an inch of the others, which are dark

brown; occasionally the brown on the five outside feathers on each side is confined to an oval spot on each web. Bill, legs, feet, and claws black. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate between the sixth and seventh, bastard primary 0·8 inch. Length of wing 3·6 inches (female 3·52 to 3·46), tail 2·6, culmen 0·68 to 0·65, tarsus 0·99 to 0·89.

The *female* differs from the male in having the head and nape dark brown. No change apparently takes place *after the autumn moult* in either sex. It is not known that *birds of the year* differ from adults. *Young in first plumage* appear to be unknown.

Strickland's Chat breeds in the cultivated districts of South-western Turkestan, and winters in the North-west Provinces of India.

a, b. ♂ ad. sk. W.N.W. of Jodhpur. W. T. Blanford, Esq. [P.].

Saxicola leucomelæna and Saxicola monticola.

These two South-African Chats and their intermediate forms are involved in the greatest obscurity; an examination of a large series leads me to hazard the following hypothesis. The white-headed form alone appears to inhabit Benguella and Damara Land. Further south and east originally dwelt a black-headed form in Great Namaqua Land, the Free State, the Transvaal, and Natal. This region appears to have been invaded by the white-headed forms, which must have bred freely with, and been absorbed by, the original inhabitants, so that we now find in the regions inhabited by the black-headed form almost every intermediate form between the two. Curiously enough the intermediate forms are on an average slightly the largest birds. This may possibly be accounted for on the supposition that the cross-breeding improved the race, or that the half-breds had for some cause or other a harder struggle for existence, and the small examples were gradually eliminated by natural selection. It is probably a parallel case to *S. picata* and *S. capistrata*; but it may perhaps be best to classify the intermediate forms in two groups, calling those examples in which the head is light grey *Saxicola leucomelæna monticola*, and those in which the head is dark grey *Saxicola monticola leucomelæna*, though, if my theory be correct, a large enough series will show not two intermediate forms only, but an infinite series.

The synonymy of the white-headed form is as follows:—

13. Saxicola leucomelæna.

Saxicola leucomelæna, *Burch. Trav. S. Afr.* i. p. 335 (1822); *Strickl. & Sclater, Jard. Contr. Orn.* 1852, p. 146; *Sharpe, Cat. Afr. B.* p. 26 (1871); *Gurney, Anderss. B. Dam. Ld.* p. 109 (1872); *Blanford & Dresser, P. Z. S.* 1874, p. 233, pl. xxxvii. fig. 2; *Sharpe, ed. Layard's B. S. Afr.* p. 247 (1877, *male*).

Dromolæa albipileata, *Bocage, Jorn. Sc. Lisb.* p. 151 (1867, *male*).

Saxicola alpina, *Chapman, Trav. S. Afr.* ii. p. 399 (1868, *male*).

Saxicola atmorii, *Tristram, Ibis*, 1869, p. 206; *Gray, Hand-l. B.* i.

p. 225. no. 3235 (1869); *Gurney, Anderss. B. Dam. Ld.* p. 110 (1872, *birds of the year*).

Saxicola albipileata (*Bocage*), *Gray, Hand-l. B.* i. p. 226. no. 3258 (1869, *male*).

Saxicola diluta, *Blanf. & Dresser, P. Z. S.* 1874, p. 234, pl. xxxix. fig. 1; *Sharpe, ed. Layard's B. S. Afr.* p. 243 (1877, *female*).

Saxicola anderssoni, *Sharpe, ed. Layard's B. S. Afr.* p. 249 (1877, *male*).

Adult male in breeding-plumage. Head, nape, and hind neck white; lores, the feathers round the eye, ear-coverts, sides of the neck, back, and the whole of the underparts except the tips of the under tail-coverts and part of the tail black; scapulars black, the outer webs of the outer ones white, joining onto the white upper and median wing-coverts; rest of the wing dark brown; lower rump, belly, and under tail-coverts white; longest upper tail-coverts black, tipped with white, rest white; two central tail-feathers dark brown, the two next with more or less white on the outer web; four outside tail-feathers on each side white, generally one or more and sometimes all with a dark brown terminal patch on each web, occasionally becoming confluent; under surface of wing dark brown. Bill, legs, feet, and claws black. Wings with the third, fourth, and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·25 to 0·9 inch. Length of wing 4·3 to 4·05 inches, tail 2·9 to 2·6, culmen 0·85 to 0·76, tarsus 1·25 to 1·15.

The *female* in breeding-plumage has the head, nape, rump, tail, and wings as in the male, except that the dark brown of the tail and wings is not so dark; all the rest of the parts are grey, shading into nearly white on the centre of the belly. The change which is produced by the *autumn moult*, which appears to take place in February and March, is unimportant. *Young in first plumage* appear to be unknown; but *birds of the year* of both sexes have the rump, upper and under tail-coverts, and tail as in the adult, the whole of the rest of the plumage being brown. *After the second moult* the adult plumage is assumed, except that the belly of the male is white, the fully adult plumage with black belly apparently not being assumed until the third moult is complete.

Burchell's Chat has only been obtained from Benguela and Damara Land, where it is supposed to be a resident.

a. Imm. st.	South Africa.	Purchased.
b. ♀ ad. sk.	Damara Land (*C. J. Andersson*). (Type of *S. diluta*, Blanf. & Dresser.)	R. B. Sharpe, Esq.
c. ♂ imm. sk.	Dariep, Damara Land, Oct. 27, 1860 (*C. J. A.*).	R. B. Sharpe, Esq.
d. ♂ imm. sk.	Hykomkap, Damara Land, April 1866 (*C. J. A.*).	R. B. Sharpe, Esq.
e, *f.* ♂ ♀ ad.; *g.* Imm. sk.	Hykomkap, May 1866 (*C. J. A.*).	R. B. Sharpe, Esq.
h, *i.* Imm. sk.	Otjimbinque, May 1866 (*C. J. A.*).	R. B. Sharpe, Esq.
k. ♀ imm. sk.	Swakop river, October 26, 1860 (*C. J. A.*).	R. B. Sharpe, Esq.

l, m. ♂ ♀ ad. sk.	Oosop, Swakop river, Jan. 30, 1864 (*C. J. A.*).	R. B. Sharpe, Esq.
n. ♂ ad.; *o.* ♂ imm. sk.	The Reeds, Swakop river, May 28, 1864 (*C. J. A.*).	R. B. Sharpe, Esq.
p, q. ♂ ♀ ad. sk.	Swakop river, June 22, 1863 (*C. J. A.*).	R. B. Sharpe, Esq.

The following is the synonymy of the intermediate forms, in which the predominant strain is apparently derived from the preceding :—

Saxicola leucomelæna-monticola.

Dromolæa æquatorialis (♀ *nec* ♂), *Hartl. Journ. Orn.* 1861, p. 112 (*male*).
Saxicola griseiceps, *Blanf. & Dresser, P. Z. S.* 1874, p. 233, pl. xxxvii. fig. 3 (*male*).
Saxicola leucomelæna, *Burch. apud Blanf. & Dresser, P. Z. S.* 1874, p. 233 (*partim*), pl. xxxvii. fig. 1 (*male*).
Saxicola tephronota, *Gurney, Ibis*, 1877, p. 343 (*female*).

This is an intermediate form between *S. monticola* and *S. leucomelæna*. In typical examples the *adult male* differs from either of them in having the forehead, crown, and nape grey. It is also slightly larger than either of its near allies. Length of wing 4·55 to 4·35 inches, tail 3·1 to 2·75, culmen 0·9 to 0·8, tarsus 1·35 to 1·2.

The *female* is scarcely distinguishable from that of *S. leucomelæna*, but is somewhat darker in colour and larger in size. The seasonal changes are unimportant. *Males between the second and third moults* have the belly white as in the allied forms. *Young in first plumage* appear to be unknown. *Birds of the year* supposed to belong to this form are brown, except the rump, upper and under tail-coverts, and tail, which are coloured as in the adult.

So far as is known, the geographical range of this form extends from Great Namaqua Land, through Colesberg, Bloemfontein to Potchefstroom in the Southern Transvaal. It is supposed to be a resident.

a, b. ♂ ♀ ad. st.	South Africa.	Purchased.
c, d. ♂ ♀ ad. sk.	South Africa.	Sir A. Smith [C.].
e. ♂ ad. sk.	Colesberg (*T. C. Atmore*). (Type of *S. griseiceps*, Blanford & Dresser.)	R. B. Sharpe, Esq.
f. ♀ ad.; *g, h.* imm. sk.	Thomas River, British Caffraria, Jan. 7, 1879.	H. Trevelyan, Esq. [P.].
i. ♂ ad. sk.	Bloemfontein, Nov. 15, 1872.	Dr. Exton [P.].
k, l. ♂ ♀ ad.; *m.* imm. sk.	Bloemfontein, Dec. 9, 1876.	Dr. Exton [P.].
n. ♀ ad. sk.	Potchefstroom, Jan. 4, 1877.	Dr. Exton [P.].
o. ♀ ad. sk.	Potchefstroom (*T. Ayres*). (Type of *S. tephronota*, Gurney.)	J. H. Gurney, Esq. [P.].
p. ♂ ad. sk.	Koanquip, Great Namaqua Land, July 4, 1861 (*C. J. Andersson*).	R. B. Sharpe, Esq.
q. ♂; *r, s.* ♀ ad. sk.	Koy's Fountain, Great Namaqua Land, June 1862 (*C. J. A.*).	R. B. Sharpe, Esq.

The dark-grey headed forms, which approach nearer to *S. monticola* than they do to *S. leucomelæna*, are fortunate in having no synonymy. They may be called

Saxicola monticola-leucomelæna.

This form is very nearly allied to *Saxicola monticola*, but differs from it in the *adult male* having the forehead, crown, and nape dark grey, with a broad ill-defined paler grey eye-stripe. It appears also to be intermediate in size between the preceding and the following forms. Length of wing 4·5 to 4·2 inches, tail 3·0 to 2·9, culmen 0·88 to 0·8, tarsus 1·34 to 1·21.

The *female* is a darker grey even than that of *S. monticola*; but the upper and median wing-coverts are white. The seasonal changes are unimportant; the annual moult takes place in January and February. *The male of the second year* has the belly white, as in the nearly allied species. *Young in first plumage* appear to be unknown. *Birds of the year* are entirely brown, with the exception of the rump, upper and under tail-coverts, and tail, which are coloured as in the adults.

This form is only known from Potchefstroom, Colesberg, and Natal. It is supposed to be a resident.

a. ♀ ad. sk.	South Africa.	Purchased.
b. Imm. sk.	South Africa (*E. L. Layard*).	R. B. Sharpe, Esq.
c, *d*. Ad. sk.	Colesberg (*Ortlepp*).	R. B. Sharpe, Esq.
e, *f*. ♂ ad. sk.	Potchefstroom, Feb. 1878 (*W. Lucas*).	R. B. Sharpe, Esq. [P.].
g. Imm. sk.	Potchefstroom, Dec. 1876 (*W. Lucas*).	Dr. Exton [P.].
h. ♂ ad.; *i–n*. Imm. sk.	Potchefstroom, Jan. 1877 (*W. Lucas*).	Dr. Exton [P.].

The synonymy of the black-headed form is as follows:—

14. Saxicola monticola.

Le Traquet montagnard, *Levaill. Ois. d'Afr.* iv. p. 105, pl. 184. fig. 2 (1805, *male*).

Œnanthe monticola, *Vieill. N. Dict. d'Hist. Nat.* xxi. p. 434 (1818, *ex Levaill.*).

Vitiflora rupicola, *Boie, Isis*, 1828, p. 320 (*male*).

Grillivora capensis, *Swains. Classif. B.* ii. p. 238 (1837, *male*).

Saxicola monticola (*Vieill.*), *Smith, Ill. Zool. S. Afr. Birds*, letter-press to pl. xxviii. (1839); *Gray, Gen. B.* i. p. 179 (1846); *Layard, B. S. Afr.* p. 106 (1867); *Gray, Hand-l. B.* i. p. 226. no. 3248 (1869); *Blanf. & Dresser, P. Z. S.* 1874, p. 232; *Sharpe, ed. Layard's B. S. Afr.* p. 246 (1877, *male*).

Dromolæa monticola (*Vieill.*), *Bp. Consp.* i. p. 302 (1850); *Cab. Mus. Hein.* i. p. 9 (1850); *Bocage, Jorn. Sc. Lisb.* i. p. 151 (1867, *male*).

Dromolæa æquatorialis (♂ *nec* ♀), *Hartl. Journ. Orn.* 1861, p. 112 (*male*).

Saxicola castor, *Hartl. P. Z. S.* 1865, p. 747; *Gray, Hand-l. B.* i.

p. 225. no. 3229 (1869); *Blanf. & Dresser, P. Z. S.* 1874, p. 235, pl. xxxviii. fig. 2; *Sharpe, ed. Layard's B. S. Afr.* p. 244 (1877, *female*).

In this form the *adult male* has the entire head black, except occasionally a narrow white eye-stripe above the lores; it is also a slightly larger bird than *S. leucomelæna*, which it otherwise resembles. Length of wing 4·4 to 4·2 inches, tail 3·0 to 2·8, culmen 0·9 to 0·8, tarsus 1·4 to 1·25.

The *female* differs from that of *S. leucomelæna* in being of a much darker grey colour, and in having the upper and median wing-coverts pale grey instead of white. The seasonal changes appear to be unimportant. *Males of the second year* have the belly white. *Young in first plumage* appear to be unknown. *Birds of the year* are entirely brown, except the rump, upper and under tail-coverts, and tail, which are coloured as in the adult.

The Mountain-Chat has a wide range, extending from Great Namaqua Land through Colesberg, Bloemfontein, and the Transvaal as far north as Rustenberg. It is believed to be a resident.

a. Imm. sk.	South Africa (*E. L. Layard*).	R. B. Sharpe, Esq. [P.].
b. ♀ ad. sk.	South Africa (*E. L. Layard*).	R. B. Sharpe, Esq. [P.].
c. Imm. sk.	Elands Post (*T. C. Atmore*).	R. B. Sharpe, Esq. [P.].
d. ♂ ad. sk.	Colesberg (*Ortlepp*).	R. B. Sharpe, Esq. [P.].
e. ♂ ad. sk.	Vaal river, May 6, 1879 (*T. Ayres*).	Dr. Bradshaw.
f, g. ♂ ad., ♂ imm. sk.	Rustenberg, June 21, 1877 (*W. Lucas*).	R. B. Sharpe, Esq. [P.].
h. ♂ ad. sk.	Aamhoup, Damara Land, June 28, 1861 (*C. J. Andersson*).	R. B. Sharpe, Esq.
i. ♀ ad. sk.	South Africa.	Purchased.
k. ♀ ad. sk.	Desolate part of High Veldt, Transvaal, June 15 (*F. Oates*).	C. G. & F. Oates, Esqrs. [P.].

15. Saxicola xanthoprymna.

Saxicola xanthoprymna, *Hempr. et Ehr. Symb. Phys. Aves*, fol. dd (1833); *Dresser & Blanford, Ibis*, 1874, p. 342; *Blanf. & Dresser, P. Z. S.* 1874, p. 223.
Saxicola erythropygia, *E. Cavendish Taylor, Ibis*, 1867, p. 61.
Saxicola mœsta, *Licht. apud Shelley, B. Egypt*, p. 76 (1872); *apud Sharpe & Dresser, B. Eur.* pt. xvi. (1873).

Adult male in breeding-plumage. General colour of the upper parts greyish brown, shading into dull chestnut on the rump and upper tail-coverts. Lores, chin, throat, cheeks, ear-coverts, and sides of the neck black; eye-stripe greyish white, extending to the nape; wings brown, the greater wing-coverts and secondaries with pale tips; tail dark brown, the basal third of the two centre feathers and the basal two thirds of the remainder white; axillaries and under wing-coverts black; breast and belly greyish white, shading into dull chestnut on the flanks and under tail-coverts. Bill, legs, feet, and claws black. Wings with the third, fourth, and fifth

primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·65 inch. Length of wing 3·7 inches, tail 2·4, culmen 0·7, tarsus 0·94.

The *female* appears to be unknown. It is not known whether any change in the colour of the plumage is produced by the *autumn moult*. *Males of the year* have the black feathers replaced by dark brown, and the feathers of the throat are tipped with brown. *Young in first plumage* are unknown.

The Red-rumped Chat appears to be confined to Nubia, where it is probably a resident.

There is no example of this very rare Chat in the British Museum. The type (male of the year) is in the Berlin Museum, a second male of the year is in the collection of Mr. E. Cavendish Taylor, and an adult male is in the collection of Canon Tristram. No other examples are known.

16. Saxicola mœsta.

Saxicola mœsta, *Licht. Verz. Doubl.* p. 33 (1823); *Bp. Consp.* i. p. 304 (1850); *Gray, Hand-l. B.* i. p. 225. no. 3228 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 355 (1869); *Dresser, B. Eur.* pt. xxx. (1874); *Blanf. & Dresser, P. Z. S.* 1874, p. 223.

Saxicola philothamna, *Tristram, Ibis*, 1859, pp. 58, 299, pl. ix.; *Tristram, Ibis*, 1867, p. 93; *Heugl. Orn. N.O.-Afr.* i. p. 355 (1869); *Gray, Hand-l. B.* i. p. 225. no. 3217 (1869); *J. H. Gurney, jun., Ibis*, 1871, p. 79; *Sharpe & Dresser, B. Eur.* pt. xvii. (1873).

Adult male in breeding-plumage. Forehead, crown, and nape, extending more or less onto the mantle, white, slightly suffused with buff and grey; back and scapulars dark brown; rump and upper tail-coverts white, more or less suffused with buff. Wings and wing-coverts brown, more or less broadly edged with white on the outer webs; rump and upper tail-coverts buff; tail brown, the basal half of the outside feathers, the basal third of the centre, and nearly two thirds of the rest pale dull chestnut; lores, ear-coverts, cheeks, chin, throat, sides of neck, axillaries, and under wing-coverts sooty black; the rest of the underparts white, slightly suffused with buff on the breast and more so on the under tail-coverts; inner margin of quills greyish white. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 1·0 to 0·8 inch. Length of wing 3·75 to 3·5 inches, tail 2·85 to 2·7, culmen 0·8 to 0·72, tarsus 1·16 to 1·0.

In the *female* the forehead, crown, and nape are pale dull chestnut, shading into lavender-grey on the back and again into pale dull chestnut on the rump and upper tail-coverts. Tail-feathers as in the male; lores and ear-coverts dull chestnut; underparts pale buff, darker on the breast and under tail-coverts, and greyer on the axillaries; inner margin of quills pale buff. *After the autumn moult* the head and nape are suffused with grey, leaving a narrow pale eye-stripe, and the innermost secondaries have buff margins.

Birds of the year and *young in first plumage* appear to be unknown.

Tristram's Chat is a resident bird in Eastern Algeria, Egypt, Arabia, and Palestine.

a, *b*, *c*. ♂, *d*. ♀ ad. sk.	Tunis.	L. Fraser, Esq. [C.].
e, *f*. ♂ ♀ ad. sk.	Algerian Sahara.	Purchased.
g. ♂ ad. sk.	Laghouat, Algeria, Nov. 18, 1856 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
h. ♂ ad. sk.	Near Beersheeba, Palestine.	Canon Tristram [C.].

17. Saxicola deserti.

Saxicola stapazina (*Linn.*), *apud Licht. Eversm. Reis. Buchara*, p. 128 (1823).

Saxicola deserti, *Temm. Pl. Col.* pl. 359. fig. 2 (1825); *Rüpp. Neue Wirb., Vög.* p. 79 (1835); *Rüpp. Syst. Uebers.* p. 58 (1845); *Gray, Gen. B.* i. p. 179 (1848); *Bp. Consp.* i. p. 303 (1850); *Cab. Mus. Hein.* i. p. 10 (1850); *Heugl. Syst. Uebers.* p. 58 (1845); *Jerd. B. Ind.* ii. p. 132 (1863); *Filippi, Viagg. Pers.* p. 347 (1865); *Loche, Expl. Sci. Algér., Ois.* i. p. 208 (1867); *Heugl. Orn. N.O.-Afr.* i. p. 352 (1869); *Gray, Hand-l. B.* i. p. 224. no. 3212 (1869); *Blanf. Geol. & Zool. Abyss.* p. 362 (1870); *Shelley, B. Egypt*, p. 74 (1872); *Blanf. & Dress. P. Z. S.* 1874, p. 224 (*partim*); *Dresser, B. Eur.* pt. xxv. (1875, *partim*); *Dresser, Ibis*, 1875, p. 337; *Blanf. East. Pers.* ii. p. 148 (1876, *partim*).

Saxicola isabellina, *Rüpp. apud Temm. Pl. Col.* pl. 472. fig. 1 (1829).

Saxicola pallida, *Rüpp. Neue Wirb., Vög.* p. 80 (1835); *Gray, Gen. B.* i. p. 179 (1846); *Bp. Consp.* i. p. 304 (1850).

Saxicola atrogularis, *Blyth, J. A. S. Beng.* xvi. p. 131 (1847); *Blyth, Cat. B. Mus. As. Soc.* p. 167 (1849); *Horsf. & Moore, Cat. B. Mus. E.I. Co.* i. p. 287 (1854); *Gould, B. Asia*, pt. xvii. (1865); *Gray, Hand-l. B.* i. p. 224. no. 3211 (1869); *Hume & Henders. Lahore to Yark.* p. 205 (1873); *Prjev. Rowley's Orn. Misc.* ii. p. 183 (1877).

Saxicola salina, *Eversm. Bull. Soc. Mosc.* xxiii. pt. 2, p. 567, pl. viii. fig. 2 (1850); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Severtz. Stray Feath.* 1875, p. 429.

Saxicola atrigularis (*Blyth*), *Bp. Consp.* i. p. 304 (1850).

Saxicola gutturalis, *Licht. Nomencl. Av.* p. 35 (1854); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Gray, Hand-l. B.* i. p. 225. no. 3223 (1869).

Saxicola homochroa, *Tristram, Ibis*, 1859, p. 59; *Heugl. N.O.-Afr.* i. p. 343 (1869); *Gray, Hand-l. B.* i. p. 225. no. 3227 (1869); *Shelley, B. Egypt*, p. 75 (1872).

Saxicola albomarginata, *Salvad. Atti Soc. Tor.* p. 507 (1870).

Adult male in breeding-plumage. General colour of the upper parts buff, richest on the lower back and dullest on the head: rump and upper tail-coverts white, shading into pale buff on the longest upper tail-coverts; lores, the feathers behind the eye, the ear-coverts, the sides of the neck, the cheeks, the chin, and the throat black; eye-stripes narrow, obscure white, meeting over the bill and extending to the nape. Wings and wing-coverts nearly black, with more or less obscure pale tips; innermost secondaries

brown, margined with buff; basal half of two central tail-feathers white, terminal half black; remainder of tail-feathers with rather more than the basal half white; underparts below the throat pale buff, richest on the chest and palest on the under tail-coverts; axillaries and under wing-coverts black, with white tips; inner margin of quills white. Bill, legs, feet, and claws black. Wings with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·75 to 0·65 inch. Length of wing 3·9 to 3·6 inches (females 3·5 to 3·3), tail 2·55 to 2·35, culmen 0·65 to 0·6, tarsus 1·1 to 1·0.

Adult female in breeding-plumage. The black on the lores, the feathers behind the eye, the ear-coverts, the sides of the neck, the cheeks, the chin, and the throat is replaced by buff, the nearly black wings and wing-coverts by brown, the rump and upper tail-coverts are more suffused with buff, and the black on the tail is replaced by dark brown. I can find no satisfactory evidence that any important change in the coloration takes place by the *autumn moult*. *Males of the year* have the black feathers on the throat and wings narrowly margined with buff. *Females of the year* scarcely differ from adults. *Young in first plumage* have pale centres to the feathers of both the upper and under parts, except to those of the rump and belly. The quills and tail-feathers are tipped with buff.

Females of this species much resemble *S. isabellina*, but may at once be distinguished by their smaller feet.

The Desert-Chat is a resident of the arid plains of the Algerian Sahara, Egypt, Nubia, Palestine, Arabia, and the highlands of Southern Persia. A few wander into Abyssinia in winter. Eastwards it breeds in the plains of Turkestan and winters in Baluchistan, Scinde, and the North-west Provinces of India.

a, *b*. ♂ ad. sk.	Algeria (*Verreaux*).	R. B. Sharpe, Esq.
c, *d*. Juv. sk.	Tunis.	L. Fraser, Esq. [C.].
e. ♂ ad. sk.	Thebes.	Dr. Leith Adams [P.].
f. ♀ ad. sk.	Nubia (*Verreaux*).	R. B. Sharpe, Esq.
g. ♂ ad. sk.	Zulla, Annesley Bay, Red Sea, Nov. 20, 1868.	W. T. Blanford, Esq.
h. ♂ ad. sk.	Zulla, Annesley Bay, Red Sea, Jan. 29, 1868.	W. T. Blanford, Esq.
i. ♂ ad. sk.	North end of Dead Sea.	Canon Tristram [C.].
k. ♀ ad. sk.	Shiraz, September 1870.	Col. St. John [C.].
l, *m*. ♀ ad. sk.	Afghanistan (*Griffith*).	India Museum.
n, *o*. ♂ ad. sk.	Scinde (*Dr. Gould*).	India Museum.
p, *q*, *r*. ♂ ad. sk.	Kangra.	Capt. Stackhouse Pinwill [P.].
s, *t*. ♂ ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
u. ♀ ad. sk.	Kashgar (*Dr. Bellew*).	India Museum.
v. Skeleton.	Algeria.	R. B. Sharpe, Esq.

18. Saxicola montana.

Saxicola montana, *Gould, B. Asia*, pt. xvii. (1865); *Gray, Hand-l B.* i. p. 225. no. 3224 (1869).

Saxicola deserti, *Temm. apud Blanf. & Dresser, P. Z. S.* 1874, p. 224 (*partim*), *apud Dresser, B. Eur.* pt. xxv. (1874, *partim*), *apud Blanf. East. Pers.* ii. p. 148 (1876, *partim*).

The *adult male in breeding-plumage* differs from that of the preceding species in being slightly larger, in having scarcely any trace of buff on the breast and belly, which is nearly pure white, and in having the basal half of the inner web of the primaries and of the adjoining five secondaries white to the shaft, a character which is as strongly developed in the young in first plumage as in the adult. Length of wing 4·0 to 3·7 inches (females 3·9 to 3·6), tail 2·75 to 2·35, culmen 0·74 to 0·68, tarsus 1·1 to 0·95.

The *female* scarcely differs in colour from that of the preceding species, but is a much larger bird. *After the autumn moult* the black feathers of the throat are tipped with buff. *Males of the year* resemble females, except in having the basal half of the inner web of the primaries and of the adjoining secondaries white to the shaft, a character which is also as strongly marked in *males in first plumage*. *Young in first plumage* of both sexes are greyer in colour than females, and have the feathers of the breast and back with obscure pale centres and dark margins.

Gould's Chat breeds in Thibet and Eastern Turkestan, migrating to Cashmere, Baluchistan, and the island of Socotra during the cold season.

a. ♂ ad. sk.	Gwádar, Baluchistan, Dec. 1871.	W. T. Blanford, Esq. [C.].
b. ♂ ad. sk.	Sibb near Dizak, Baluchistan, 4000 ft., March 26, 1872.	W. T. Blanford, Esq. [C.].
c. ♂ ad. sk.	Yarkand.	R. B. Sharpe, Esq. [P.].
d. ♂ ad. sk.	Cashmere.	Purchased.
e. ♂ ad. sk.	Kashgar (*Dr. Bellew*).	India Museum.

Saxicola melanoleuca and Saxicola stapazina.

This Chat has two forms, which have been separated specifically by Brehm, Blanford, and Dresser, in my opinion on insufficient grounds. As they may, however, be regarded as imperfectly segregated subspecies, I have kept their synonymy distinct. That of the Eastern form is as follows:—

19. Saxicola melanoleuca.

The Red or Russet-coloured Wheatear (♂ *partim, nec* ♀), *Edwards, Nat. Hist. B.* p. 31, pl. xxxi. (1743).
Le Cul-blanc roux (♂ *partim, nec* ♀), *Briss. Orn.* iii. p. 459 (1760).
Muscicapa melanoleuca, *Güld. Nov. Com. Petr.* xix. p. 468, pl. xv. (1775).
Le Motteux, ou Cul-blanc roux (♂ *partim, nec* ♀), *Buff. Hist. Nat. Ois.* v. p. 246 (1778).
Russet Wheatear (♂ *partim, nec* ♀), *Lath. Gen. Syn.* ii. p. 468 (1783).
Motacilla stapazina, *Linn.* (♂ *partim, nec* ♀), *apud Gmel. Syst. Nat.* i. p. 966 (1788).

Sylvia stapazina (*Linn.*) (♂ *partim, nec* ♀), *apud Lath. Ind. Orn.* ii. p. 530 (1790).
Vitiflora rufa (♂ *partim, nec* ♀), *Steph. Shaw's Gen. Zool.* x. p. 569 (1817); *Brehm, Vög. Deutschl.* p. 406 (1831, *partim*).
Saxicola stapazina (*Linn.*), *apud Temm. Man. d'Orn.* i. p. 239 (1820, *partim*); *apud Meyer, Taschenb. Zus. u. Ber.* p. 98 (1822, *partim*); *apud Gould, B. Eur.* ii. pl. xci. (1837, *partim*); *apud Keys. u. Blas. Wirb. Eur.* pp. lix, 193 (1840); *apud Nordm. Démid. Voy. Russ. mérid.* iii. p. 131 (1840); *apud Rüpp. Syst. Uebers.* p. 58 (1845); *apud Degl. Orn. Eur.* i. p. 486 (1849); *apud Bp. Consp.* i. p. 303 (1850, *partim*); *apud Cab. Mus. Hein.* i. p. 10 (1850, *partim*); *apud Heugl. Syst. Uebers.* p. 26 (1856); *apud Tristram, Ibis*, 1859, p. 300; *apud Linderm. Vög. Griechenl.* p. 110 (1860); *apud Newt. List B. Eur. Blasius*, p. 10 (1862, *partim*); *apud Filippi, Viagg. Pers.* p. 347 (1865); *apud Degl. et Gerbe, Orn. Eur.* i. p. 454 (1867, *partim*); *apud Heugl. Orn. N.O.-Afr.* i. p. 349 (1869); *apud Doderl. Avif. Sicil.* p. 111 (1869); *apud Gray, Hand-l. B.* i. p. 224. no. 3207 (1869, *partim*); *apud Fritsch, Vög. Eur.* p. 194 (1870); *apud Salvad. Faun. Ital. Ucc.* p. 88 (1871).
Saixcola xanthomelæna, *Hempr. et Ehr. Symb. Phys., Aves*, fol. aa (1833, *autumn plumage*); *Heugl. Orn. N.O.-Afr.* p. 349 (1869).
Saxicola eurymelæna, *Hemp. et Ehr. Symb. Phys., Aves*, fol. bb (1833, *summer plumage*); *Tristram, Ibis*, 1867, p. 95; *Gray, Hand-l. B.* i. p. 225. no. 3218 (1869); *Shelley, B. Egypt*, p. 73 (1872).
Saxicola albicilla, *von Müll. Naumannia*, iv. p. 28 (1851); *id. Beitr. Orn. Afr.* pl. iii. (1853).
Saxicola melanoleuca (*Güld.*), *Blanf. & Dresser, P. Z. S.* 1874, p. 222; *Dresser, B. Eur.* pt. xxv. (1874); *Dresser & Blanf. Ibis*, 1874, pp. 338, 340; *Blanford, East. Pers.* ii. p. 150 (1876); *Bogd. B. Cauc.* p. 92 (1879).

Adult male in breeding-plumage. General colour white, frequently suffused with grey on the head and with buff on the back and breast; a patch of black on the sides of the head includes a narrow frontal line, the lores, the feathers round the eye, the ear-coverts, and extends some way down the sides of the neck, embracing the entire chin and throat, but not extending quite to the wing; wings, wing-coverts, axillaries, under wing-coverts, and under surface of wings black; tail-feathers white, the two central feathers black for the terminal two thirds, the two outer feathers broadly tipped with black, the black tips to the remainder being narrower, and generally quite obsolete on several. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·85 to 0·6 inch. Length of wing 3·65 to 3·3 inches, tail 2·4 to 2·25, culmen 0·6 to 0·55, tarsus 0·85 to 0·83.

In the *female* the general colour of the upper parts is an almost uniform brown, darker on the wings and darkest on the tail; the rump and the white on the tail-feathers are the same as in the male; the feathers of the throat are buff, showing half-concealed dark bases; breast buff, shading into buffish white on the rest of the underparts, except the axillaries and under wing-coverts, which are dark brown. It is not known that any change in the colour of the plumage is produced by the *autumn moult*. *Birds of the year* have

the whole of the white feathers (except those of the rump, upper tail-coverts, and tail) suffused with buff, the wing-coverts and innermost secondaries broadly edged with buff, the quills narrowly tipped with buff, and the tail-feathers narrowly tipped with white. *Young in first plumage* resemble the female of the year, but have obscure pale centres and dark terminal bars to the feathers of the throat, breast, crown, and back.

The Eastern form of the Black-throated Chat breeds in Italy, Greece, South Russia, Asia Minor, Palestine, and South Persia; it passes through Egypt and Nubia on migration, and probably winters in Central Africa.

a. ♂ ad. sk.	Smyrna (*Dr. Krüper*).	Consul Merlin [P.].
b, *c*. ♂; *d*. ♀ ad. sk.	Smyrna (*Dr. Krüper*).	R. B. Sharpe, Esq.
e. ♂, *f*. Juv. sk.	Anascha, Taurus, Asia Minor, April 1875 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
g. ♂ ad. sk.	Mount Carmel, March 26, 1864 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
h. ♀ ad. sk.	Surghaga, Palestine.	Canon Tristram [C.].
i. ♀ ad. sk.	Nazareth.	Canon Tristram [C.].
k. ♂ ad. sk.	Hills near Merone, Palestine.	Canon Tristram [C.].

The synonymy of the Western form is as follows:—

20. Saxicola stapazina.

The Red or Russet-coloured Wheatear (♂ *partim*, *nec* ♀), *Edwards, Nat. Hist. B.* p. 31, pl. xxxi. (1743).

Le Cul-blanc roux (♂ *partim*, *nec* ♀), *Briss. Orn.* iii. p. 459 (1760).

Le Motteux, ou Cul-blanc roux (♂ *partim*, *nec* ♀), *Buff. Hist. Nat. Ois.* v. p. 246 (1778).

Russet Wheatear (♂ *partim*, *nec* ♀), *Lath. Gen. Syn.* ii. p. 468 (1783).

Motacilla stapazina, *Linn.* (♂ *partim*, *nec* ♀), *apud Gmel. Syst. Nat.* i. p. 966 (1788).

Sylvia stapazina (*Linn.*) (♂ *partim*, *nec* ♀), *apud Lath. Ind. Orn.* ii. p. 530 (1790); (♂ *nec* ♀) *apud Temm. Man. d'Orn.* p. 137 (1815).

Vitiflora rufa (♂ *partim*, *nec* ♀), *Steph. Shaw's Gen. Zool.* x. p. 569 (1817); *Brehm, Vög. Deutschl.* p. 406 (1831, *partim*).

Œnanthe stapazina (*Linn.*), *apud Vieill. N. Dict. d'Hist. Nat.* xxi. p. 425 (1818).

Saxicola stapazina (*Linn.*), *apud Temm. Man. d'Orn.* i. p. 239 (1820, *partim*); *apud Meyer, Taschenb. Zus. u. Ber.* p. 98 (1822, *partim*); *apud Gould, B. Eur.* ii. pl. xci. (1837, *partim*); *apud Bp. Consp.* i. p. 303 (1850, *partim*); *apud Cab. Mus. Hein.* i. p. 10 (1850, *partim*); *apud Jaub. et Barth.-Lapomm. Rich. Orn.* p. 224 (1859); *apud Newt. List B. Eur. Blasius*, p. 10 (1862, *partim*); *apud Degl. et Gerbe, Orn. Eur.* i. p. 454 (1867, *partim*); *apud Loche, Expl. Sci. Algér., Ois.* i. p. 204 (1867); *apud Gray, Hand-l. B.* i. p. 224. no. 3207 (1869, *partim*); *apud Irby, B. Gibr.* p. 79 (1875).

Vitiflora stapazina (*Linn.*), *apud Boie, Isis*, 1822, p. 552; *apud Brehm, Vogelf.* p. 224 (1855).

Saxicola atrogularis, *Dubois, Ois. Eur.* pl. lvi. (1862, *nec Blyth*).

Saxicola rufa (*Brehm*), *apud Blanf. & Dresser, P. Z. S.* 1874, p. 221 (1874, *nec* V. rufa, *Stephens*, 1817, *apud B. & D.*!!); *apud Dresser, B. Eur.* pt. xxv. (1874).

This is a Western form of *S. melanoleuca*, differing only in having the black on the throat not extending beyond the upper throat. It is also more constantly suffused with buff on the back and breast. Intermediate forms occur; and examples from Spain, in which the black on the throat is more extended than usual, are indistinguishable from examples from Asia Minor, in which the black on the throat is less extended than usual. There is no difference in size. It appears to go through the same changes of plumage as its Eastern ally, and both males and females are on an average more rufous at all seasons.

The Western form of the Black-throated Chat breeds in the south of France, Spain, Western Algiers, and Morocco, wintering in Western Africa.

a, b. ♂ ad. st.	Europe.	Baron Laugier.
c. ♂ ad. sk.	Ain Djendeli, Algeria, May 13, 1857 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
d. ♂ ad. sk.	Egyptian Nubia.	R. B. Sharpe, Esq.
e. ♂ ad. sk.	River Gambia.	R. B. Sharpe, Esq.
f. Skeleton.	South Europe.	Purchased.

21. Saxicola finschii.

Saxicola stapazina (*Linn.*), *apud Ménétr. Cat. Rais. Cauc.* p. 30 (1832).
Saxicola libanotica, *Hempr. et Ehr. apud Tristram, Ibis*, 1867, pp. 91, 94.
Saxicola finschii, *Heugl. Orn. N.O.-Afr.* i. p. 350 (1869).
Saxicola xanthomelæna, *Hempr. et Ehr. apud Shelley, B. Egypt*, p. 74 (1872).
Saxicola erythræa, *Hempr. et Ehr. apud Blanf. & Dresser, P. Z. S.* 1874, p. 222; *apud Dresser, B. Eur.* pt. xxv. (1874); *apud Blanf. East. Pers.* ii. p. 150 (1876); *apud Danford, Ibis*, 1878, p. 16; *apud Bogd. B. Cauc.* p. 92 (1879).

Adult male in breeding-plumage. General colour white, occasionally suffused with grey or buff; lores, sides of the neck, ear-coverts, chin, throat, upper breast, scapulars, wing-coverts, quills, axillaries, and under wing-coverts black; tail-feathers white, the two central feathers black for the terminal half, the remaining feathers tipped with black from a quarter to half an inch; under surface of quills dark brown, paler on the margin of the basal half of the inner webs. Bill, legs, feet, and claws black. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary slightly shorter than the fifth, bastard primary 0·8 to 0·7 inch. Length of wing 3·6 to 3·25 inches (females 3·3 to 3·1), tail 2·4 to 2·15, culmen 0·68 to 0·62, tarsus 1·0 to 0·9.

In the *female* the rump, upper tail-coverts, tail, and the under-parts below the breast resemble the male; the rest of the upper parts are grey, darker and browner on the wings; the feathers of the chin and throat are pale grey, with more or less concealed black bases. Nothing is known of the changes of plumage which this Chat undergoes, except that in *females of the year* the pale grey tips to the feathers of the throat entirely conceal the dark bases.

The Euphrates Pied Chat breeds in the rocky hills of the Caucasus, Eastern Asia Minor, Palestine, and Persia, its range extending only a short distance beyond the valley of the Euphrates. In Palestine it is a resident, but it appears to leave the other parts of its breeding-range, and, passing through Egypt on migration, winters in Nubia.

a, *b*. ♂ ad. sk.	Persia.	
c. ♂ ad. sk.	Shiraz, 5000 feet, June 13, 1869.	Col. St. John [C.].
d. ♂ ad. sk.	Neby Yunas, Palestine.	Canon Tristram [C.].
e. ♂ ad. sk.	Bethel, December 21, 1863 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
f. ♂ ad. sk.	Anascha, Taurus, March 18, 1876 (*C.G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
g. ♂ ad. st.	[Asia Minor.]	Purchased.

22. Saxicola chrysopygia.

Dromolæa chrysopygia, *De Filippi, Arch. Zool. Genova*, ii. p. 381 (1863); *De Filippi, Viagg. Pers.* p. 347 (1865).
Saxicola chrysopygia (*De Fil.*), *Gray, Hand-l. B.* i. p. 226. no. 3257 (1869); *Blanf. East. Persia*, ii. p. 151 (1876).
Saxicola kingi, *Hume, Ibis*, 1871, p. 29; *id. Stray Feath.* i. p. 187 (1873).

Adult male in breeding-plumage. General colour of the upper parts brown, shading into pale dull chestnut on the rump; lores dark brown; ear-coverts darkish brown; eye-stripe somewhat indistinct, pale grey; wings brown, the secondaries tipped with greyish white and margined with greyish buff; upper tail-coverts pale dull chestnut; tail darkish brown, the basal third of the two centre feathers and the basal three fourths of the others dull chestnut. Chin, throat, and centre of belly greyish white, shading into pale brown on the breast and flanks, and into dull chestnut on the under tail-coverts; axillaries and under wing-coverts pale grey, with darker centres; inner margin of quills pale buffish brown. Bill, legs, feet, and claws black. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary equal to the sixth, bastard primary 0·95 to 0·8 inch. Length of wing 3·6 to 3·55 inches, tail 2·41 to 2·25, culmen 0·72 to 0·68, tarsus 1·1 to 1·0.

The *female* scarcely differs from the male, nor is any important change of colour produced by the *autumn moult*. *Birds of the year* and *young in first plumage* appear to be unknown.

The Red-tailed Chat breeds in the rocky hills of Persia, and winters in Baluchistan, Scinde, and North-west India.

a. ♀ ad. sk.	Rugin, S.E. of Karmán, S.E. Persia, 9000 feet, May 1, 1872.	W.T. Blanford, Esq. [C.].
b. ♂ ad. sk.	Sita Nai, Scinde, Dec. 2, 1876.	W.T. Blanford, Esq. [P.].
c. ♂ ad. sk.	Nari Nai, Scinde, Jan. 1, 1877.	W.T. Blanford, Esq. [P.].

23. Saxicola galtoni.

Saxicola sperata (*Lath.*), *apud Gray, Gen. B.* i. p. 179 (1848); *apud Bp. Consp.* i. p. 304 (1850); *apud Layard, B. S. Afr.* p. 107 (1867); *apud Sharpe, Cat. Afr. B.* p. 27 (1871).
Erythropygia galtoni, *Strickl. Jard. Contr. Orn.* 1852, p. 147.
Ruticilla nov. sp.?, *Bocage, Jorn. Sc. Math. Lisbon*, i. p. 136 (1867).
Ruticilla (Saxicola) familiaris (*Steph.*), *apud Blanf. Ann. Nat. Hist.* 1869, iv. p. 329.
Aedon sperata (*Gmel.*), *Gray, Hand-l. B.* i. p. 211. no. 2985 (1869).
Aedon galtoni (*Strickl.*), *Gray, Hand-l. B.* i. p. 211. no. 2986 (1869).
Saxicola galtoni (*Strickl. & Sclater*), *Blanf. & Dresser, P. Z. S.* 1874, p. 237; *Sharpe, ed. Layard's B. S. Afr.* p. 234 (1876); *Bocage, Journ. Sc. Math. Lisbon*, vi. p. 274 (1878).
Saxicola familiaris, *Steph. apud Sharpe, Cat. Afr. B.* p. 27 (1871); *apud Gurney, Anderss. B. Dam. Land*, p. 103 (1872).

Adult male in breeding-plumage. General colour of the upper parts brown; lores dark brown; ear-coverts russet-brown; wings brown, the wing-coverts and innermost secondaries narrowly margined with pale brown; rump and upper tail-coverts chestnut; two centre tail-feathers dark brown, with chestnut bases less than one third of the entire length, the remainder chestnut, with brown tips about a quarter of an inch in extent. Underparts, including the axillaries, under wing-coverts, and inner margin of quills, are almost uniform pale buffish brown. Bill, legs, feet, and claws black. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the seventh, bastard primary 0·9 to 0·85 inch. Length of wing 3·65 to 3·15 inches, tail 2·65 to 2·35, culmen 0·7 to 0·68, tarsus 1·01 to 0·94.

In the *female* the lores are coloured like the crown, otherwise the plumage resembles that of the male. *After the autumn moult* the pale edges to the wing-coverts and secondaries are somewhat broader. *Birds of the year* are supposed to be similar to adults. *Young in first plumage* have pale centres and dark tips to most of the small feathers.

The Familiar Chat appears to be a resident in Benguela, Damara Land, Namaqua Land, Natal, the Transvaal, and the Cape Colony.

a. ♂ ad. sk.	South Africa.	
b. Ad. sk.	South Africa (*E. L. Layard*).	R. B. Sharpe, Esq.
c. Ad. sk.	Cape Town, April 24, 1866 (*C. J. Andersson*).	R. B. Sharpe, Esq.
d. Ad., *e.* Juv. sk.	Cape Town, Nov. 1865 (*C. J. Andersson*).	R. B. Sharpe, Esq.
f. ♂ ad. sk.	Elands Post (*T. C. Atmore*).	R. B. Sharpe, Esq.
g. ♀ ad. sk.	Aamhoup, Great Namaqua Land, July 4, 1861 (*C. J. A.*).	R. B. Sharpe, Esq.
h, *i.* ♂, *k.* ♀ ad. sk.	Swakop river, Damara Land (*C. J. A.*).	R. B. Sharpe, Esq.
l. ♂ ad. sk.	Ladysmith (*F. Oates*).	C. G. and F. Oates, Esqrs. [P.].
m. ♂ ad. sk.	Inyali, Oct. 2.	C. G. and F. Oates, Esqrs. [P.].

24. Saxicola sennaarensis.

This is another of M. Botta's discoveries which has escaped the attention of ornithologists in the Museum of the Jardin des Plantes. It differs from its South-African ally in being a larger bird and slightly darker in colour. The most marked difference is in the distribution of the colours on the feathers of the tail: the dark brown on the two centre feathers is much less developed, only extending to the terminal half, whilst the dark brown on the remaining feathers is much more developed, extending for more than half an inch. Bill, legs, feet, and claws black. Wings with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·8 inch. Length of wing 3·7 inches, tail 2·47, culmen 0·7, tarsus 1·0.

Nothing is known of the difference which may be attributable to *age, sex, or season.*

The only example known of the Sennaar Familiar Chat is the type, from which the above description is taken, in the Museum of the Jardin des Plantes in Paris, which was obtained by M. Botta in Sennaar in 1839.

25. Saxicola œnanthe.

Le Cul-blanc, ou Vitrec, ou Motteux, *Briss. Orn.* iii. p. 449 (1760).
Le Cul-blanc gris, *Briss. Orn.* iii. p. 452 (1760).
Le Cul-blanc cendré, *Briss. Orn.* iii. p. 454 (1760).
Motacilla œnanthe, *Linn. Syst. Nat.* i. p. 332 (1766); *Tunstall, Orn. Brit.* p. 2 (1771); *Gmel. Syst. Nat.* i. p. 966 (1788); *Bechst. Naturg. Deutschl.* iv. p. 640 (1795).
Le Motteux, anciennement Vitrec, vulgairement Cul-blanc, *Buff. Hist. Nat. Ois.* v. p. 237 (1778).
Le Motteux de Sénégal, *Buff. Hist. Nat. Ois.* v. p. 249 (1778).
Le Vitrec, ou Motteux, *Daubent. Pl. Enl.* no. 554 (1778)
Cul-blanc du Sénégal, *Daubent. Pl. Enl.* no. 583. fig. 2 (1778).
Wheatear, *Lath. Gen. Syn.* ii. pt. 2, p. 465 (1783).
Rufous Wheatear, *Lath. Gen. Syn.* ii. pt. 2, p. 469 (1783).
Sylvia œnanthe (*Linn.*), *Lath. Gen. Syn. Suppl.* i. p. 288 (1787); *Lath. Ind. Orn.* p. 529 (1790); *Temm. Man. d'Orn.* p. 135 (1815); *Forster, Syn. Cat. Brit. B.* p. 15 (1817).
Motacilla leucorhoa, *Gmel. Syst. Nat.* i. p. 966 (1788, *ex Buff.*).
Sylvia leucorhoa (*Gmel.*), *Lath. Ind. Orn.* p. 531 (1790).
Saxicola œnanthe (*Linn.*), *Bechst. Orn. Taschenb.* i. p. 217 (1802); *Wolf, Taschenb.* i. p. 251 b (1810); *Koch, Syst. baier. Zool.* i. p. 190 (1816); *Ménétr. Cat. Rais. Cauc.* p. 30 (1832); *Rüpp. Neue Wirb., Vög.* p. 79 (1835); *Gould, B. Eur.* ii. pl. xc. (1837); *Keys. u. Blas. Wirb. Eur.* pp. lix, 192 (1840); *Nordm. Démid. Voy. Russ. mérid.* iii. p. 130 (1840); *Rüpp. Syst. Uebers.* p. 58 (1845); *Gray, Gen. B.* i. p. 178 (1846); *Degl. Orn. Eur.* i. p. 482 (1849); *Bp. Consp.* i. p. 303 (1850); *Cab. Mus. Hein.* i. p. 9 (1850); *Middend. Reis. Sibir. Zool.* ii. pt. 2, p. 174 (1853); *Heugl. Syst. Uebers.* p. 26 (1856); *Sund. Sv. Fogl.* p. 54 (1856); *Hartl. Orn. W.-Afr.* p. 64 (1857); *Jaub. et Barth.-Lapomm. Rich. Orn.* p. 222 (1859); *Linderm. Vög. Griechenl.* p. 110 (1860); *Newt. List B. Eur. Blasius*, p. 10 (1862); *Gould, B. Gt. Br.* ii. pl. lxv. (1862); *Newton, Baring-Gould's Iceland*, p. 409 (1863);

Radde, Reis. Sibir., Vög. p. 244 (1863); *Filippi, Viagg. Pers.* p. 347 (1865); *Degl. et Gerbe, Orn. Eur.* i. p. 450 (1867); *Loche, Expl. Sci. Algér., Ois.* i. p. 202 (1867); *Doderl. Avif. Sicil.* p. 110 (1869); *Gray, Hand-l. B.* i. p. 224. no. 3205 (1869); *Dall & Bann. Tr. Chic. Acad.* i. p. 276 (1869); *Heugl. Orn. N.O.-Afr.* i. p. 347 (1869); *Godman, Azores*, p. 25 (1870); *Fritsch, Vög. Eur.* p. 193 (1870); *Salvad. Faun. Ital. Ucc.* p. 89 (1871); *Swinh. P. Z. S.* 1871, p. 360; *Harting, Handb. Br. B.* p. 13 (1872); *Shelley, B. Egypt*, p. 71 (1872); *Coues, Key N.-Amer. B.* p. 76 (1872); *Newt. ed. Yarr. Br. B.* i. p. 347 (1873); *Severtz. Turkest. Jevotn.* p. 65 (1873); *Baird, Brewer, & Ridgw. Hist. N.-Amer. B.* i. p. 60 (1874); *Dresser, B. Eur.* pt. xxxi. (1874); *Irby, B. Gibr.* p. 78 (1875); *Dresser, Ibis*, 1875, p. 335; *Blanf. East. Pers.* ii. p. 146 (1876); *Tacz. Bull. Soc. Zool. France*, p. 145 (1876); *Prjev. Rowley's Orn. Misc.* ii. p. 183 (1877); *David et Oust. Ois. Chine*, p. 165 (1877); *Bogd. B. Cauc.* p. 92 (1879).

Motacilla vitiflora, *Pallas, Zoogr. Rosso-Asiat.* i. p. 472 (1811).

Vitiflora œnanthe (*Linn.*), *Leach, Syst. Cat. Mamm. &c. Brit. Mus.* p. 21 (1816); *Boie, Isis*, 1822, p. 552.

Œnanthe vitiflora (*Pall.*), *Forster, Syn. Cat. Brit. B.* p. 54 (1817).

Œnanthe cinerea, *Vieill. N. Dict. d'Hist. Nat.* xxi. p. 418 (1818).

Vitiflora septentrionalis, *Brehm, Vög. Deutschl.* p. 403 (1831).

Vitiflora grisea, *Brehm, Vög. Deutschl.* p. 405 (1831).

Vitiflora cinerea (*Vieill.*), *Brehm, Vög. Deutschl.* p. 405 (1831).

Saxicolar ostrata, *Hempr. et Ehr. Symb. Phys., Aves*, fol. aa (1833); *Gray, Hand-l. B.* i. p. 225. no. 3232 (1869).

Saxicola libanotica, *Hempr. et Ehr. Symb. Phys., Aves*, fol. bb (1833); *Gray, Hand-l. B.* i. p. 225. no. 3220 (1869).

Saxicola œnanthoides, *Vig. Zool. Blossom*, p. 19 (1839); *Gray, Gen. B.* i. p. 179 (1846); *id. Hand-l. B.* i. p. 225. no. 3222 (1869).

Vitiflora major, *Brehm, Vogelf.* p. 224 (1855).

Saxicola leucorhoa (*Gmel.*), *Hartl. Orn. W.-Afr.* p. 64 (1857); *Gray* *, *Hand-l. B.* i. p. 225. no. 3231 (1869).

Saxicola œnanthe grisea,
Saxicola œnanthe cinerea,
Saxicola œnanthe septentrionalis,
Saxicola œnanthe alpestris,
Saxicola œnanthe melanoptera,
Saxicola œnanthe maritima,
Saxicola œnanthe crassirostris,
Saxicola œnanthe macrorhynchos,
} *A. E. Brehm, Verz Samml. C. L. Brehm*, p. 5 (1860).

Adult male in breeding-plumage. General colour of the upper parts pale slate-grey; forehead and eye-stripe, which extends to the nape, white; lores and upper part of the ear-coverts black; wings and wing-coverts nearly black, a few traces of the autumnal buff margins to the feathers generally left; rump and upper tail-coverts white; tail white, except the terminal three fifths of the two centre feathers, and the terminal fourths of the others, which are nearly black. Underparts very pale buff, slightly darker on the throat and breast; axillaries and under wing-coverts white, with dark centres; inner margin of quills brown. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and

* Spelt *leucorrhoa*.

longest, second primary sometimes as long as the fourth, bastard primary 0·75 to 0·55 inch. Length of wing 4·2 to 3·5 inches (females 3·7 to 3·45), tail 2·45 to 2·0, culmen 0·7 to 0·62, tarsus 1·2 to 1·05.

Adult female in breeding-plumage. General colour of the upper parts dull brown; forehead and eye-stripe buffish white, much narrower than in the male; lores and upper part of the ear-coverts brown; wings and wing-coverts not so dark as in the male; rump and upper tail-coverts white; tail as in the male, but the dark parts not quite so dark; underparts as in the male. *After the autumn moult* both sexes have a buffish-brown margin to every feather, so that they are scarcely distinguishable, and resemble the adult female in breeding-plumage except that the quills and tail-feathers are margined with buffish brown at the tip, and the innermost secondaries and wing-coverts are similarly margined, not only at the tip but along the outside webs. The underparts are also darker in colour. It is not known that *birds of the year* differ from adults. *Young in first plumage* resemble the female, but have obscure transverse terminal dark bars and pale centres to most of the feathers of the upper and under parts.

The Wheatear Chat breeds throughout Central and Northern Europe as far north as land exists, and in Southern Europe where the mountains are high enough to allow of the growth of the pine and birch. Westwards its breeding-range extends over Iceland as far as Greenland and Labrador, and eastwards throughout Northern Siberia, the mountains of Persia and Syria, and beyond Behring's Straits into Alaska. In winter it is found in North and West Africa and the east coast south of the equator. The Asiatic birds migrate to Mongolia, Northern India, and Persia. On the American continent it has been found in winter as far south as the Bermudas.

a. ♂ ad. sk.	Albany River, Canada.	George Barnston, Esq. [P.].
b, *c*. ♂ ♀ ad. sk.	Lichtenfels, Greenland, June 27, 1874.	R. B. Sharpe, Esq. [P.].
d. ♂ ad.; *e*. Juv. sk.	Lichtenfels, July 1874.	R. B. Sharpe, Esq. [P.].
f. Juv., *g*, *h*. Imm. sk.	Lichtenfels, August 1874.	R. B. Sharpe, Esq. [P.].
i. Ad. st.	England.	J. Gould, Esq.
k. ♀ ad. st.	Wiltshire.	Col. Montagu [P.].
l, *m*. Juv. st.	Pagham Harbour, Sept. 1872.	R. B. Sharpe, Esq. [P.].
n, *o*. Juv. sk.	Pagham Harbour, Sept. 1, 1872.	R. B. Sharpe, Esq. [P.].
p. ♂ ad. st.	Brighton.	J. G. Children, Esq. [P.].
q, *r*. ♂ ♀ ad. st.	Cookham, Berks, March.	Mr. W. Briggs [P.].
s, *t*. ♂ ♀ ad. st.	Hampstead.	R. B. Sharpe, Esq. [P.].
u, *v*. ♂ ♀ ad. sk.	Thetford, Norfolk, March 1857 (*Percy Godman*).	F. Godman and O. Salvin, Esqrs. [P.].
w. ♂ ad.; *x*, *y*. Juv.	Cambridgeshire.	Mr. J. Baker [C.].
z. ♀ imm. sk.	Belgium, Sept. 15, 1871.	Brussels Museum [P.].
a'. ♂ ad. sk.	S. Norway, July 1866 (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].
b'. ♀ ad. sk.	Borregaard, S. Norway, June 1866 (*J. Baker*).	F. Godman and O. Salvin, Esqrs. [P.].

c'. ♀ ad. sk.	Valencia, Spain, March 29, 1872.	H. Saunders, Esq. [P.].
d'. ♂ ad. sk.	Flores, Azores, May 1865 (*F. G.*).	F. Godman and O. Salvin, Esqrs. [P.].
e'. ♂ ad. sk.	River Gambia.	R. B. Sharpe, Esq.
f'. ♂ ad. sk.	Chartum (*Schaufuss*).	R. B. Sharpe, Esq.
g', *h'*, *i'*. ♂, *k'*. ♀ ad. sk.	Adigrat, Tigré, 8000 feet, April 1868.	W. T. Blanford, Esq. [C.].
l'. ♂ ad. sk.	Nubia.	R. B. Sharpe, Esq.
m'. Ad. sk.	Gon, Egypt, March 8, 1875.	J. H. Gurney, Esq., Jun. [P.].
n', *o'*, *p'*. Ad. sk.	Egypt (*Dr. Christie*).	G. Turnbull, Esq. [P.].
q'. ♀ ad sk.	Mombasa, East Africa (*J. W. Handford*).	Rev. F. A. Buxton [P.].
r'. ♀ ad. sk.	Syria.	Dr. Standinger.
s'. ♂ ad. sk.	Mount Carmel.	Canon Tristram [C.].
t'. ♀ ad. sk.	Kishon.	Canon Tristram [C.].
u'. ♂ ad. sk.	Taurus, Asia Minor, April 13, 1876 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
v'. ♀ ad. sk.	Near Shiraz, Sept. 1870.	Col. St. John [C.].
w'. ♂ ad. sk.	Pass to Anan, Elburz Mountains, 8000 feet, August 14, 1872.	W. T. Blanford, Esq. [C.].
x'. ♀ ad. sk.	Kokand, 1857.	
y'. ♂ ad. sk.	Schtschutschja, Yalmal Pen., August 3, 1876.	Dr. O. Finsch [C.].
z'. ♀ ad. sk.	Ugorskja, Obb R., Sept. 11, 1876.	Dr. O. Finsch [C.].
a''. ♂ ad. sk.	Krasnojarsk, Siberia, April 25, 1879 (*Kibort*).	Henry Seebohm, Esq. [P.].
b''. ♂ ad. sk.	Ust Zylma, June 3, 1875.	Henry Seebohm, Esq. [P.].
c''. Skeleton.	England (*Warwick*).	Purchased.
d'', *e''*, *f''*. ♂ ♀ juv. skull.	Silesia.	Dr. A. Günther.

26. Saxicola aurita *.

The Red or Russet-coloured Wheatear (♂ *nec* ♀), *Edw. Nat. Hist.* B. p. 31, pl. xxxi. (1743).
Le Cul-blanc roussâtre, *Briss. Orn.* iii. p. 457, pl. xxv. fig. 4 (1760).
Le Cul-blanc roux (♀ *nec* ♂), *Briss. Orn.* iii. p. 459 (1760).
Motacilla stapazina, *Linn. Syst. Nat.* p. 331 (1766, *nec Vieill., Temm., Bonap., Cab., Gray, &c.*); (♀ *nec* ♂) *Gmel. Syst. Nat.* i. p. 966 (1788); (♀ *nec* ♂) *Lath. Ind. Orn.* ii. p. 530 (1790).
Le Motteux, ou Cul-blanc roussâtre, *Buff. Hist. Nat. Ois.* v. p. 245 (1778).
Le Motteux, ou Cul-blanc roux (♀ *nec* ♂), *Buff. Hist. Nat. Ois.* v. p. 246 (1778).
Russet Wheatear (♀ *nec* ♂), *Lath. Gen. Syn.* ii. p. 468 (1783).
Motacilla stapazina, *β*, *Gmel. Syst. Nat.* i. p. 966 (1788).

* According to the rules of the British Association the name by which this bird ought to be called is either *S. stapazina* or *S. albicollis*. The former name is out of court, having been extensively applied to another species, which was probably intended to be included by Linnæus under his name. The latter I reject on the ground that the name given by Temminck has been used by an overwhelming majority of ornithologists, and ought therefore to stand.

Sylvia stapazina (*Linn.*) (♀ *nec* ♂), *Temm. Man. d'Orn.* p. 137 (1815).
Vitiflora rufa (♀ *nec* ♂), *Steph. Shaw's Gen. Zool.* x. p. 569 (1817).
Œnanthe albicollis, *Vieill. N. Dict. d'Hist. Nat.* xxi. p. 424 (1818).
Sylvia albicollis (*Vieill.*), *Bonn. et Vieill. Enc. Méth.* p. 485 (1820).
Saxicola aurita, *Temm. Man. d'Orn.* i. p. 241 (1820); *Meyer, Taschenb. Zus. u. Ber.* p. 99 (1822); *Temm. Pl. Col.* no. 257. fig. 1 (1824); *Rüpp. Neue Wirb., Vög.* p. 79 (1835); *Gould, B. Eur.* ii. pl. 92 (1837); *Nordm. Démid. Voy. Russ. mérid.* iii. p. 131 (1840); *Degl. Orn. Eur.* i. p. 488 (1849); *Cab. Mus. Hein.* i. p. 10 (1850); *Heugl. Syst. Uebers.* p. 26 (1856); *Hartl. Orn. W.-Afr.* p. 64 (1857); *Linderm. Vög. Griechenl.* p. 111 (1860); *Filippi, Viagg. Pers.* p. 347 (1865); *Degl. et Gerbe, Orn. Eur.* i. p. 455 (1867); *Heugl. Orn. N.O.-Afr.* i. p. 348 (1869); *Fritsch, Vög. Eur.* p. 195 (1870); *Salvad. Faun. Ital. Ucc.* p. 88 (1871).
Vitiflora aurita (*Temm.*), *Boie, Isis*, 1822, p. 552.
Sylvia rufescens, *Savi, Orn. Tosc.* i. p. 223 (1827).
Saxicola amphileuca, *Hempr. et Ehr. Symb. Phys., Aves*, fol. bb (1833); *Gray, Hand-l. B.* i. p. 225. no. 3219 (1869); *Shelley, B. Egypt*, p. 72 (1872).
Saxicola aurita, *Temm.*, var. libyca, *Hempr. et Ehr. Symb. Phys., Aves*, fol. aa (1833).
Saxicola stapazina (*Linn.*), *Keys. u. Blas. Wirb. Eur.* pp. lix, 193 (1840); *Rüpp. Syst. Uebers.* p. 58 (1845); *Gray, Gen. B.* i. p. 178 (1846); *Dresser, B. Eur.* pt. xxv. (1874); *Blanf. East. Pers.* ii. p. 150 (1876).
Saxicola albicollis (*Vieill.*), *Bp. Consp.* i. p. 303 (1850); *Gray, Hand-l. B.* i. p. 224. no. 3206 (1869).
Vitiflora assimilis, *Brehm, Vogelf.* p. 224 (1855).

Adult male in breeding-plumage. General colour white, frequently suffused with grey on the head and with buff on the back and breast, the remains of immature plumage; a patch of black on the sides of the head includes a narrow frontal line, the lores, the feathers round the eye, the ear-coverts, and extends some way down the sides of neck; wing-coverts, axillaries, under wing-coverts, and under surface of quills black; tail-feathers white, the two central feathers black for the terminal two thirds, the two outer feathers broadly tipped with black, the black tips to the remainder being narrower and generally almost obsolete on several. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and longest, second primary slightly shorter than the fourth, bastard primary 0·65 to 0·7. Length of wing 3·6 to 3·5 inches (females 3·5 to 3·4), tail 2·45 to 2·3, culmen 0·65 to 0·6, tarsus 0·9 to 0·85.

The *female* differs from the male in having all the black parts replaced by brown. The head and back are also paler brown, and the throat and breast suffused with brown. It is not known that any change takes place in the colour of the plumage of adults in consequence of the *autumn moult*; but *birds of the year* are suffused with grey on the head, with both grey and buff on the back, and with buff on the breast and flanks, the wing-coverts and innermost secondaries are broadly edged with buff, the primaries narrowly tipped with buff, and the tail-feathers narrowly tipped with white. *Young in first plumage* have obscure pale centres and dark terminal bands to the feathers of the head, back, and breast, and

the wing-coverts and innermost secondaries are broadly edged, and the quills and tail-feathers broadly tipped with buff.

The Black-eared Chat breeds throughout Southern Europe, and occasionally in North Africa, extending eastwards to Asia Minor, Palestine, and South Persia. A few remain to winter in Algiers; but the majority pass on to Senegal and probably to Central Africa, since it is found only during the breeding-season in Egypt and Nubia, and has not been recorded from Abyssinia.

a. ♂ ad. sk.	South Europe (*Moeschler*).	R. B. Sharpe, Esq.
b. ♂ ad. sk.	Dalmatia.	Purchased.
c. ♂ ad. sk.	Smyrna, April 4, 1871 (*Dr. Krüper*).	R. B. Sharpe, Esq.
d. ♂ ad. sk.	Smyrna, April 4, 1871 (*Dr. Krüper*).	Consul Merlin [P.].
e. ♂ ad. sk.	Anascha, Taurus, April 10, 1876 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
f, *g*. ♂ ♀ ad. sk.	Palestine.	Canon Tristram [C.].
h, *i*. ♂ ♀ ad. sk.	Syria.	Purchased.
k. ♀ ad. sk.	Egypt.	J. H. Gurney, Jun., Esq. [P.].
l, *m*. ♂ ad. sk.	Khifan M'sakta, Algeria, May 13, 1857 (*O. S.*).	F. Godman and O. Salvin, Esqrs. [P.].
n. Juv. sk.	Algeria.	Purchased.
o. ♂ ad. sk.	Tangiers.	M. Favier [C.].

27. Saxicola vittata.

Saxicola vittata, *Hempr. et Ehr. Symb. Phys., Aves*, fol. cc (1833); *Blanf. & Dresser, P. Z. S.* 1874, p. 220; *Dresser, Ibis*, 1875, p. 336.

Saxicola leucolæma, *Antin. et Salvad. Atti R. Acc. Sci. Tor.* viii. p. 32 (1872); *Salvad. et Antin. Ann. Mus. Civ. Gen.* iv. p. 464, pl. ii. (1873).

Saxicola melanogenys, *Severtz. Turkest. Jevotn.* p. 120 (1873); *id. Stray Feath.* 1875, p. 429.

Saxicola melanotis, *Severtz. Turkest. Jevotn.* pl. viii. figs. 5, 6 (1873); *id. Stray Feath.* 1875, p. 429.

Adult male in breeding-plumage. Head and nape, extending onto the upper back, greyish white; lores and ear-coverts black; the rest of the back and scapulars black; wings and wing-coverts nearly black; rump and upper tail-coverts white; tail white, except the terminal two thirds of the two centre feathers and the terminal fourth of the remainder, which are black, the black tip on the outside feathers extended to half the length of the feather on the outside webs. Underparts white; axillaries and under wing-coverts black; inner margin of quills dark brown. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·6 inch. Length of wing 3·9 inches, tail 2·55, culmen 0·7, tarsus 0·7.

The *female* differs from the male in having the black parts replaced by brown, and in having the head and nape suffused with brown. It is not known what changes are produced by the *autumn moult*. *Birds of the year* or *young in first plumage* are unknown.

The Black-backed Eared Chat breeds in the plains of North-western Turkestan and Cashmere, and winters in North-western Arabia and the Bogos country.

The British Museum does not possess an example of this very rare Chat. The type (an adult male) is in the Berlin Museum. No other skins are known, except those collected by Severtzoff, examples of which are in the St. Petersburg Museum, and those collected by Dr. Scully in Gilgit, one of which is in my collection.

28. Saxicola pileata.

Le grand Motteux *ou* Cul-blanc du Cap de Bonne-espérance, *Buff. Hist. Nat. Ois.* v. p. 248 (1778).
Cape Wheatear, *Lath. Gen. Syn.* ii. p. 470 (1783).
Black-hooded Wheatear, *Lath. Gen. Syn.* ii. p. 471 (1783).
Motacilla hottentotta, *Gmel. Syst. Nat.* i. p. 965 (1788).
Motacilla pileata, *Gmel. Syst. Nat.* i. p. 965 (1788).
Sylvia hottentotta (*Gmel.*), *Lath. Ind. Orn.* ii. p. 531 (1790).
Sylvia pileata (*Gmel.*), *Lath. Ind. Orn.* ii. p. 531 (1790).
Le Traquet imitateur, *Levaill. Ois. d'Afr.* iv. p. 92, pls. 181, 182 (1805).
Œnanthe imitatrix, *Vieill. N. Dict. d'Hist. Nat.* xxi. p. 422 (1818).
Saxicola pileata (*Gmel.*), *Smith, Ill. Zool. S. Afr., Birds*, pl. xxviii. (1839); *Gray, Gen. B.* i. p. 179 (1846); *Sundev. K. Sv. Vet.-Ak. Handl.* ii. no. 3, p. 44 (1857); *Layard, B. S. Afr.* p. 103 (1867); *Gray, Hand-l. B.* i. p. 225. no. 3238 (1869); *Gurney, Anderss. B. Dam. Ld.* p. 108 (1872); *Blanf. & Dress. P. Z. S.* 1874, p. 239; *Sharpe, ed. Layard's B. S. Afr.* p. 238 (1876); *Bocage, Jorn. Sc. Math. Lisbon*, v. p. 252 (1876).
Campicola pileata (*Gmel.*), *Bp. Consp.* i. p. 304 (1850); *Cab. Mus. Hein.* i. p. 10 (1850).
Saxicola hottentotta (*Gmel.*), *Strickl. & Sclater, Jard. Contr. Orn.* 1852, p. 146; *Layard, B. S. Afr.* p. 108 (1867); *Chapman, Travels S. Afr.* ii. p. 399 (1868).
Campicola livingstonii, *Tristram, P. Z. S.* 1867, p. 888.
Saxicola livingstonii (*Tristram*), *Gray, Hand-l. B.* i. p. 225. no. 3239 (1869).

Adult male in breeding-plumage. General colour of the upper parts dull buffish chestnut, brightest on the lower back, and dullest on the hind neck, and shading into black on the crown; lores, ear-coverts, and sides of the neck black; forehead and eye-stripe, extending to the nape, white; wings and wing-coverts brown, the greater median and lesser wing-coverts and the innermost secondaries edged with buffish chestnut; tail dark brown, except the basal fifth of the two central tail-feathers and the basal half of the others, which are white. Chin and throat white; cheeks and breast black; belly white, shading into buff on the flanks and under tail-coverts; axillaries and under wing-coverts white, with concealed dusky bases. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·8 to 0·6 inch. Length of wing 3·9 to 3·3 inches, tail 2·55 to 2·2, culmen 0·76 to 0·64, tarsus 1·3 to 1·16.

It is not known that the *female* differs in plumage from the male. *After the autumn moult* the buffish-chestnut margins of the wing-

coverts and innermost secondaries are broader and brighter, otherwise no important change is observable. *Birds of the year* have the black on the crown less developed, the black feathers on the breast have pale buff margins, and the tail-feathers have white tips. *Young in first plumage* have no black; the feathers of the upper parts have obscure pale tips, and the wings and tail-feathers buff tips; the underparts are pale buff, most of the feathers, especially on the breast, having dark margins.

The Black-hooded Chat appears to inhabit the whole of South Africa, from the Zambesi on the east and Damara Land on the west southwards, where it is said to frequent the higher rocky grounds during the breeding-season.

a, b. Ad. st.	South Africa.	Purchased.
c. Ad. sk.	South Africa.	Purchased.
d. Juv. sk.	South Africa.	R. B. Sharpe, Esq.
e. Ad. sk.	South Africa.	J. Rocke, Esq. [P.].
f, g. ♂ ad. sk.	Kingwilliamstown.	H. Trevelyan, Esq. [P.].
h. Ad. sk.	Natal.	R. B. Sharpe, Esq.
i, k. ♂ imm. sk.	Potchefstroom, Jan. 1877 (*W. Lucas*).	Dr. Exton [P.].
l. ♂ juv. sk.	Potchefstroom, Dec. 25, 1876 (*W. Lucas*).	Dr. Exton [P.].
m, n. Ad. sk.	Tete, Zambesi.	Dr. Kirk [C.].
o. ♂ ad. sk.	Okameja, Damara Land, Jan. 21, 1860 (*C. J. Andersson*).	R. B. Sharpe, Esq.
p. ♂ ad. sk.	Otjimbinque, June 4, 1866 (*C. J. A.*).	R. B. Sharpe, Esq.
q. Ad. sk.	Pietermaritzburg, May (*F. Oates*).	C. G. and W. Oates, Esqrs. [P.].
r, s. ♂ ♀ ad. sk.	John Scott's Farm, Transvaal, June 19 (*F. Oates*).	C. G. and W. Oates, Esqrs. [P.].

29. Saxicola albicans.

Saxicola albicans, *Wahl. Œfv. K. Vet.-Ak. Förh.* 1855, p. 213; *Blanf. & Dresser, P. Z. S.* 1874, p. 236; *Sharpe, ed. Layard's B. S. Afr.* p. 237 (1876).

Saxicola stricklandii, *Bonap., fide Gray, Hond-l. B.* i. p. 225. no. 3214 (1869); *fide Sharpe, Cat. Afr. B.* p. 27 (1871); *fide Gurney, Anderss. B. Dam. Ld.* p. 105 (1872).

Adult male in breeding-plumage. General colour of the upper parts very pale buffish brown; lores and ear-coverts scarcely darker; traces of a paler eye-stripe; wings and wing-coverts pale brown, the outside webs of the feathers margined with white; rump and upper tail-coverts white; tail white, the terminal half of the two centre feathers brown, the brown tips becoming shorter towards the outside of the tail, and disappearing altogether on the outside webs of the outside feathers; underparts pure white. Bill, legs, feet, and claws black. Wing with the second, third, and fourth primaries nearly equal and longest, bastard primary 0·75 to 0·6 inch. Length of wing 3·5 to 3·45 inches, tail 2·1 to 1·95, culmen 0·8 to 0·72, tarsus 1·25 to 1·2.

The *female* does not differ from the male. *After the annual moult,*

J.G Keulemans del. Mintern Bros. imp.

Saxicola layardi.

which takes place in December, the quills and tail-feathers are slightly darker in colour and have white tips. *Birds of the year* probably do not differ from adults. *Young in first plumage* are described by Andersson as having the upper parts and the breast mottled with brown.

The Pale Chat has only been found in Damara Land, near the sea-coast, where it is supposed to be a resident.

a. ♀ ad. sk.	Oosop, Damara Land, Nov. 1866.	C. J. Andersson, Esq. [C.].
b. ♀ ad. sk.	Oosop, Nov. 27, 1866 (*C. J. Andersson*).	R. B. Sharpe, Esq.
c. ♂ ad. sk.	Daviep, Swakop river, Dec. 27, 1866 (*C. J. A.*).	R. B. Sharpe, Esq.
d. ♀ ad. sk.	The Reeds, Swakop river, April 14, 1865 (*C. J. A.*).	R. B. Sharpe, Esq.
e. ♀ ad. sk.	Hykomkap, Dec. 3, 1866 (*C. J. A.*).	R. B. Sharpe, Esq.

30. Saxicola layardi. (Plate XVIII.)

Saxicola baroica, *Smith, Ill. Zool. S. Afr., Birds*, letterpress to pl. xxviii. (1839, *descr. null.*).
Saxicola sperata (*Lath.*), *apud Gurney, Anderss, B. Dam. Land*, p. 104 (1872).
Saxicola ——?, *Blanf. & Dresser, P. Z. S.* 1874, p. 238.
Saxicola layardi, *Sharpe, ed. Layard's B. S. Afr.* p. 236 (1876).

General colour of the upper parts earthy brown, slightly tinged with buff on the rump; lores and ear-coverts scarcely darker; traces of a paler eye-stripe; wings and wing-coverts brown, the wing-coverts and secondaries with narrow pale margins; upper tail-coverts white; tail white, the terminal half of the two centre feathers brown, the brown tips becoming shorter towards the outside of the tail, and disappearing altogether on the outside web of the outside feathers, the white of the tail slightly suffused with buff where it joins the terminal dark bands. Underparts brownish white, shading into pure white on the chin, axillaries, and under tail-coverts. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and longest, second primary intermediate in length between the fifth and sixth, bastard primary 0·6 inch. Length of wing 3·4 to 3·3 inches, tail 2·06 to 2·05, culmen 0·7 to 0·68, tarsus 1·12 to 1·11.

Nothing is known of any difference in plumage which may be attributable to *age, sex, or season*.

Smith's Chat inhabits South Africa, but the precise locality is unknown.

a. Ad. sk.	South Africa.	Sir A. Smith [C.]. (Type of *Saxicola baroica*, Smith.)
b. Ad. sk.	South Africa.	R. B. Sharpe, Esq. (Type of *Saxicola layardi*, Sharpe.)

31. Saxicola isabellina.

Motacilla strapazina, *Pall. Zoogr. Rosso-Asiat.* i. p. 474 (1811, *ex Willughby, nec* Motacilla stapazina, *Linn.*).

Saxicola isabellina, *Cretzschm. Rüpp. Atlas*, p. 52 (1826); *Rüpp. Neue Wirb., Vög.* p. 80 (1835); *id. Syst. Uebers.* p. 58 (1845); *Gray, Gen. B.* i. p. 179 (1846); *Bp. Consp.* i. p. 304 (1850); *Heugl. Syst. Uebers.* p. 26 (1856); *id. Orn. N.O.-Afr.* i. p. 344 (1869); *Gray, Hand-l. B.* i. p. 225. no. 3216 (1869); *Swinh. P. Z. S.* 1871, p. 360; *Blanf. & Dresser, P. Z. S.* 1874, p. 229; *Dresser, B. Eur.* pt. xxviii. (1874); *id. Ibis*, 1875, p. 335; *Blanf. East. Pers.* ii. p. 147 (1876); *Tacz. Bull. Soc. Zool. France*, p. 145 (1876); *Prjev. Rowley's Orn. Misc.* ii. p. 184 (1877); *David et Oust. Ois. Chine*, p. 164 (1877); *Finsch, Verh. zool.-bot. Gesellsch. Wien*, 1879, p. 164; *Bogd. B. Cauc.* p. 91 (1879); *Seebohm, Ibis*, 1880, p. 192.

Saxicola saltator, *Ménétr. Cat. Rais. Cauc.* p. 30 (1832); *Bp. Consp.* i. p. 303 (1850); *Degl. et Gerbe, Orn. Eur.* i. p. 452 (1867); *Severtz. Turkest. Jevotn.* p. 65 (1873).

Saxicola squalida, *Eversm. Add. Pall. Zoogr. Rosso-Asiat.* p. 16 (1835); *Bp. Consp.* i. p. 303 (1850); *Severtz. Turkest. Jevotn.* p. 65 (1873).

Vitiflóra saltatrix (*Ménétr.*), *Bp. Comp. List B. Eur. & N. Amer.* p. 16 (1838).

Saxicola saltatrix (*Ménétr.*), *Keys. u. Blas. Wirb. Eur.* pp. lix, 192 (1840); *Gray, Gen. B.* i. p. 178 (1846); *Degl. Orn. Eur.* i. p. 485 (1849); *Linderm. Vög. Griechenl.* p. 112 (1860); *Radde, Reis. Sibir., Vög.* p. 245 (1863); *Fritsch, Vög. Eur.* p. 194 (1870); *Shelley, B. Egypt*, p. 72 (1872).

Saxicola valida, *Licht. Nomenel. Av.* p. 35 (1854).

Saxicola œnanthe (*Linn.*), β. squalida, *Eversm., Newt. List B. Eur. Blasius*, p. 10 (1862).

Saxicola œnanthe (*Linn.*), *apud Jerdon, B. Ind.* ii. p. 132 (1863).

Dromolœa isabellina (*Rüpp.*), *Loche, Expl. Sci. Algér., Ois.* i. p. 201 (1867).

Saxicola strapazina (*Pall.*), *Tacz. Bull. Soc. Zool. France*, p. 145 (1876).

Adult male in breeding-plumage. General colour of the upper parts sandy brown (varying in individuals from dull brown to sandy brown, according to climate); eye-stripe pale buff, obscure, and extending to the nape; lores black; upper part of ear-coverts slightly darker than sides of neck; wings and wing-coverts brown, all the feathers with more or less distinct paler margins; rump and upper tail-coverts white; tail white, except the terminal three fourths of the two centre feathers and the terminal two fifths of the others, which are dark brown. Underparts pale buff, slightly darker on the throat and breast; axillaries and under wing-coverts nearly white; inner margin of quills pale buff. Bill, legs, feet, and claws black. Wing with the third and fourth primaries nearly equal and longest, second primary sometimes as long as the fourth, bastard primary 0·7 to 0·61 inch. Length of wing 3·9 to 3·6 inches (females 3·8 to 3·5), tail 2·3 to 2·05, culmen 0·71 to 0·69, tarsus 1·19 to 1·08.

The *adult female in breeding-plumage* scarcely differs from the male. *After the autumn moult* the quills and tail-feathers are margined with sandy brown at the tip, and the innermost secondaries and wing-coverts are similarly margined, not only at the tip, but along the outside webs; the underparts are also slightly darker

in colour. It is not known that *birds of the year* differ from adults. *Young in first plumage* have obscure transverse dark terminal bars and pale centres to most of the feathers of the upper and underparts.

The Isabelline Chat breeds in Asia Minor and South Russia, migrating in winter to Egypt, Nubia, and Abyssinia, in all three of which countries it is also a resident bird, as well as in Palestine. Eastwards it is a resident in Persia, and a summer visitor to Turkestan and Southern Siberia to the Pacific. It winters in Scinde and North-west India, and is a summer visitor to South-east Mongolia, Eastern Thibet, and North China.

a. Ad. st.	Abyssinia.	J. Gould, Esq.
b. Ad. st.	Abyssinia.	Dr. Rüppell [C.].
c, *d*. ♂ ♀ ad. sk.	Zoulla, Jan. 23, 1868.	W. T. Blanford, Esq. [C.].
e. ♀ ad. sk.	Senafé, Tigré.	W. T. Blanford, Esq. [C.].
f. ♂ ad. sk.	Adigrat, Tigré, April 2, 1868.	W. T. Blanford, Esq. [C.].
g. Ad. sk.	Nubia (*Mus. Holm.*).	R. B. Sharpe, Esq.
h, *i*. ♀ ad. sk.	Egypt.	Dr. Leith Adams [P.].
k, *l*. ♂ ♀ ad. sk.	Beersheba, Palestine.	Canon Tristram [C.].
m. ♂ ad. sk.	Beersheba, Palestine, Feb. 3, 1864 (*Tristram*).	F. Godman and O. Salvin, Esqrs. [P.].
n, *o*. ♂ ♀ ad. sk.	Anascha, Taurus, Asia Minor, March 1876 (*C. G. Danford*).	F. Godman and O. Salvin, Esqrs. [P.].
p. ♀ ad. sk.	Shiraz, Persia, 4750 feet.	Col. St. John [C.].
q. ♀ ad. sk.	Persian Baluchistan, Feb. 10, 1872.	W. T. Blanford, Esq. [C.].
r. ♀ ad. sk.	Gwádar, Baluchistan, December 1871.	W. T. Blanford, Esq. [C.].
s, *t*. Ad. sk.	Afghanistan (*Griffith*).	India Museum.
u, *v*. Ad. sk.	Scinde (*Dr. Gould*).	India Museum.
w. ♀ ad. sk.	N.W. India.	Capt. Stackhouse Pinwill [P.].
x, *y*. Ad. sk.	Behar.	B. H. Hodgson, Esq. [P.].
z. ♀ ad. sk.	Cashmere (*Dr. Bellew*).	India Museum.
a'. ♂ ad. sk.	Gilgit, Cashmere, April 22, 1880.	Dr. J. Scully [P.].

32. Saxicola bottæ.

Saxicola isabellina, *Rüpp. apud Horsf. & Moore, Cat. B. Mus. E.I. Co.* p. 287 (1854, ♂).

Saxicola bottæ, *Bonap. Compt. Rend.* xxxviii. p. 7 (1854, ♂); *Gray, Hand-l. B.* i. p. 226. no. 3241 (1869, ♂); *Heugl. Orn. N.O.-Afr.* i. p. 353 (1869, ♂); *Blanf. & Dresser, P. Z. S.* 1874, p. 230, pl. xxxvi. fig. 1 (♂).

Saxicola ferruginea, *Heugl. Syst. Uebers.* p. 26 (1856, ♂).

Saxicola intermedia, *Heugl. Syst. Uebers.* p. 26 (1856, ♀, *descr. nulla*).

Saxicola leucorhoides, *Heugl. Journ. Orn.* 1862, p. 291 (♀, *descr. nulla, nec Guérin*).

Saxicola heuglini, *Finsch & Hartl., fide Heugl. Orn. N.O.-Afr.* i. p. 346 (1869, ♀); *Gray, Hand-l. B.* i. p. 226. no. 3247 (1869, ♀);

Finsch & Hartl. Vög. N.-O. Afr. p. 259 (1870, ♀); *Blanf. & Dresser, P. Z. S.* 1874, p. 230, pl. xxxvi. fig. 2 (♀).
Saxicola frenata, *Heugl. Journ. Orn.* 1869, p. 158 (♂); *Heugl. Orn. N.O.-Afr.* i. p. 345 (1869, ♂); *Gray, Hand-l. B.* i. p. 226. no. 3246 (1869, ♂).
Saxicola kotschyana, *Pr. Württ., fide Heugl. Journ. Orn.* 1869, p. 158.

Adult male in breeding-plumage. General colour of the upper parts dull russet-brown; lores nearly black; upper parts of the ear-coverts dark brown; eye-stripe white, extending only above the lores; wings and wing-coverts brown, the greater wing-coverts margined with dull chestnut; rump and upper tail-coverts white; tail white, except the terminal two thirds of the two centre feathers and the terminal third of the rest, which are dark brown. Chin and throat white, shading into brownish buff on the breast, slightly paler on the centre of the belly and under tail-coverts; axillaries and under wing-coverts nearly white; inner margin of quills pale dull buff. Bill, legs, feet, and claws black. Wing with the third, fourth, and fifth primaries nearly equal and longest, second primary about equal to the sixth, bastard primary 0·9 to 0·8 inch. Length of wing 3·92 to 3·82 inches (female 3·5), tail 2·56 to 2·41, culmen 0·8 to 0·7, tarsus 1·35 to 1·29.

It is not known that the *female* differs from the male, except in size. *After the autumn moult* the tips of the tail-feathers are narrowly margined with white. *Birds of the year* and *young in first plumage* appear to be unknown.

The Abyssinian Chat appears to be confined to the highlands of Abyssinia, where it is supposed to be a resident.

a. ♂ ad. sk.	Abyssinia.	Purchased.
b, c. ♂ ad. sk.	Abyssinia (*Sir W. C. Harris*).	India Museum.
d. ♂ ad. sk.	Angollala, Shoa, May 1842 (*Sir W. C. Harris*).	India Museum.
e. ♂ ad. st.	Abyssinia.	Dr. Rüppell [C.].
f. ♂ ad. sk.	Santora, Talanta, 10,500 feet, April 23, 1868.	W. T. Blanford, Esq. [C.].
g. ♀ ad. sk.	N.E. Africa (*Verreaux*).	R. B. Sharpe, Esq.

ADDENDA.

Page 3.

REGULUS.—The Goldcrests appear to be a connecting link between the *Sylviidæ* and the *Paridæ*. This volume is already so extended that it has been thought best to refer them to the latter group.

Page 3.

ACCENTOR.—This genus, in which the tarsus is scutellated, the young more spotted than adults, and the spring moult confined to the renewal of a few damaged feathers, is neither Sylviine or Turdine. If it belong at all to the Turdiformes, it may be allied to *Bradyornis*.

Page 65. **Phylloscopus tristis.**

Add:—

y. ♂ ad. sk. Gilgit, Cashmere, March 26, 1880. Dr. J. Scully [P.]

Page 66. **Phylloscopus affinis.**

Add:—

s. ♀ ad. sk. Gilgit, Cashmere, July 29, 1879. Dr. J. Scully [P.].

Page 68. **Phylloscopus humii.**

Add:—

o. ♂ ad. sk. Gilgit, Cashmere, April 28, 1879. Dr. J. Scully [P.].
p. Juv. sk. Gilgit, Cashmere, Aug. 8, 1879. Dr. J. Scully [P.].

Page 75. **Phylloscopus subviridis.**

Add:—

l. ♂ ad. sk. Gilgit, Cashmere, April 12, 1880. Dr. J. Scully [P.]

Page 84. **Hypolais rama.**

Acrocephalus macrorhynchus (Hume), apud Scully, Stray Feath. 1876, p. 146, cannot have been an *Acrocephalus*, as Dr. Scully informs me that the bastard primary was too large. It surely must have been an example of *Hypolais rama*.

Page 104. **Acrocephalus dumetorum.**

Phyllopneuste macrorhyncha, Hume, Ibis, 1869, p. 357; *Acrocephalus macrorhynchus* (Hume), Hume, Ibis, 1871, p. 31; Hume, Stray Feath. 1875, p. 405, and 1879, p. 100, is only known from a single example obtained in the Himalayas. From the description, I should infer that it is an example of *Acrocephalus dumetorum* with the outer tail-feathers not fully grown.

Add:— Page 105. **Acrocephalus dumetorum.**

o. Ad. sk. Gilgit, Cashmere, Aug. 26, 1879. Dr. J. Scully [P.].

Add:— Page 118. **Locustella lanceolata.**

b. ♀ ad. sk. Lower Pegu (*Oates*), Jan. 4, 1880. Henry Seebohm, Esq. [P.].

Add:— Page 124. **Lusciniola major.**

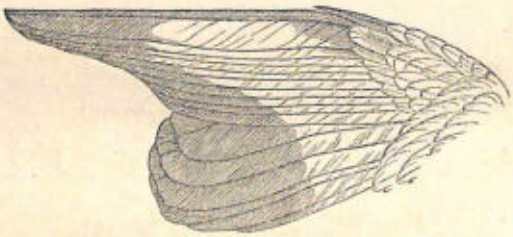
b. ♂ ad. sk. Gilgit, Cashmere, July 22, 1879. Dr. J. Scully [P.].

Page 146.

CINCLUS, NESOCICHLA.—These genera have the small bastard primary of *Turdidæ*, but the highly-concaved wing of *Timeliidæ*. They will be treated of in the latter family.

Page 182.

Add:—



Wing of *Geocichla litsitsirupa*.

Page 208. **Turdus phæopygus.**

Examples from Eastern Peru (conf. Sclat. and Salv. P. Z. S. 1867, p. 754) are still more russet-brown than typical skins from Guiana, whilst an example from the island of Tobago is more olive-brown and larger in size. If the latter form be subspecifically distinct, which must be conceded if the lines laid down by Neotropical ornithologists be followed, I propose to call it *Turdus phæopygoides*.

Page 238. Add, as an additional species :—

1*a*. Merula maxima.

Merula vulgaris ?, *Jerdon, Ibis*, 1872, p. 137.
Merula vulgaris, *Selby apud Scully, Stray Feath.* 1876, p. 99.

By the kindness of Captain Wardlaw Ramsay, I have had an opportunity of examining the example of the Ouzel obtained by Dr. Jerdon in Cashmere, and now in the Tweeddale Collection. It appears to me to belong to the large race of *Merula merula* which Dr. Scully found at Yarkand, and which is probably entitled to at least subspecific rank. The measurements of this example are as follows :—Length of wing 5·85 inches, tail 4·9, culmen 0·95, tarsus 1·5. Wing with the fourth and fifth primaries nearly equal and longest, second primary intermediate in length between the sixth and seventh, bastard primary 1·0 inch. Bill, legs, feet, and claws dark brown. The plumage is intermediate between young in first plumage and male of the year, and probably, had the first moult been completed, would not have differed in colour from the European species.

The Eastern Blackbird is only known from the three examples alluded to, obtained in Eastern Turkestan and Cashmere, where it apparently breeds at great elevations [Cashmere, July, 12,000 feet], and winters in the valleys. In both localities it is said not to be uncommon; and it is probable that in a large series small examples might be found which would be undistinguishable from the largest examples of the European race, in which case the difference between the two forms would only be subspecific.

Add :— Page 248. **Merula aurantia.**

d, e. Ad. sk.	Jamaica.	J. Gould, Esq. [P.].
f. Ad. sk.	Jamaica.	Purchased.

Add :— Page 269. **Merula atrigularis.**

m'. ♀ ad. sk.	Gilgit, Cashmere, Feb. 5, 1880.	Dr. J. Scully [P.].

Add :— Page 282. **Mimocichla bryanti.**

a. Ad. sk.	[Bahamas.]	Purchased.

Add :— Page 282. **Mimocichla ardesiaca.**

b. Ad. sk.	St. Domingo.	M. A. Sallé [C.].

Add :— Page 285. **Catharus fuscater.**

d. Ad. sk.	Pallatanga, Ecuador.	L. Fraser, Esq. [C.].

Add :— Page 287. **Catharus griseiceps.**

b. ♀ ad. sk. Santa Fé, Veragua (*E. Arcé*). O. Salvin, Esq.

Page 336.

Ruticilla moussieri.—This species has the habits of a *Saxicola*, with which genus it also agrees in the shortness of its tail. It appears to me to be undoubtedly a *Pratincola*.

Page 365.

Saxicola infuscata.—This species, with its scutellated tarsus and its spotted young in first plumage, does not agree with my diagnosis either of *Sylviinæ* or *Turdinæ*. I suspect it to be a *Bradyornis*.

Page 365.

Saxicola shelleyi, S. arnotti, and their allied species are very closely connected with *Myrmecocichla*; but their first primaries are so much developed that they undoubtedly form part of Mr. Sharpe's *Timeliidæ*, where they may be placed in the genus *Thamnobia*. I am sorry I cannot include them in my volume.

Add :— Page 367. **Saxicola albonigra.**

d. ♂ ad. sk. Gilgit, Cashmere, Jan. 9, 1880. Dr. J. Scully [P.].

Add :— Page 368. **Saxicola picata.**

n. ♂ ad. sk. Gilgit, Cashmere, March 12, 1880. Dr. J. Scully [P.].
o. ♀ ad. sk. Gilgit, Cashmere, April 21, 1880. Dr. J. Scully [P.].

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1875.
CALCUTTA

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