

veins by simple or forked nervilles. The two lower pairs of veins are closer than those above. In a leaf of medium size, the two lower pairs of nerves are 8^{mm} distant, while those of the middle are nearly 2^{cm}. The angle of divergence in joining the midrib is open, but the nerves are much curved upwards in traversing the blade.

Hab.—Chignik Bay, Aliaska Peninsula, Alaska.

ELÆODENDREÆ.

Elæodendron Helveticum Heer., Fl. Tert. Helv., III, p. 71, Pl. CXXII, fig. 5.

Leaves coriaceous, oval, equally narrowed upwards to a blunt apex and downwards to a short petiole; secondary veins (seven), unequally distant, parallel, except the lowest, which are a little more oblique and ascending higher parallel to the borders; all camptodrome, arched at a distance from the margins, forming a double series of festoons by anastomosing branches; surface rugose; borders undulate.

The leaves, according to Heer, are obtusely dentate on the borders, but part of the margin, near the base of the leaf described above, is destroyed, and Heer's fig. 5 loc. cit. shows from the middle upwards exactly the same undulations as the Alaska specimen. The only difference remarked on the leaf of Alaska is that it is more distinctly narrowed to the petiole. The specimen bears numerous fragments of *Taxodium distichum*.

Hab.—Coal Harbor, Unga Islandd, Shumagin group, south side of Aliaska.

JUGLANDINEÆ.

Juglans Woodiana Heer. Pflanz. v. Vancouver, p. 9, Pl. II, figs. 4-7.

Two fragmentary specimens.

Hab.—Chignik Bay.

REMARKS ON THE SYSTEMATIC ARRANGEMENT OF THE AMERICAN TURDIDÆ.

By LEONHARD STEJNEGER.

The group here under consideration, the so-called "family" *Turdidæ*,* has given much trouble to those authors who have tried to arrange the genera naturally, and to define their limits distinctly. I do not intend to give here an analysis of their different essays, but as the last, viz, Mr. Seebohm's in the fifth volume of the "Catalogue of Birds in the British Museum," is very radical and opposed to commonly accepted

* I am not at all convinced that the groups of the *Passeres*, generally called families, are really equivalent to the family groups of the other orders of birds or other vertebrates; but as I am, for the present, unable to take up this question, I have contented myself with the generally adopted nomenclature.

views, I cannot pass it by in silence, inasmuch as the present study may be regarded as a reaction, provoked by the arrangement proposed in the above mentioned work.

It may then be proper to state first, that the definition of the group *Turdidae* (=Seebohm's *Turdinæ*), given by Mr. Seebohm, seems to be a very proper one, and I think he has therein expressed the only chief character which really indicates the relationship of the birds to be included in this family. The peculiar spotted first plumage of the *Turdidae* is a very striking feature, and its coincidence with booted tarsi very remarkable. A careful comparison with forms, which, without showing those characters, have at different times been referred to the *Turdidae*, will convince us that the limits traced by Mr. Seebohm are the only reliable ones, and that the family thus defined is a very natural group, and, indeed, one of the best among the *Passeres*. It is only to be regretted that Mr. Seebohm did not include a few other forms which have the same peculiarities. I may especially allude to the *Myadestina*, the position of which will be discussed in full below. His concluding remarks on page 2 seem, however, to indicate that he himself has been aware of this fault.

It is not difficult to foresee that his definition of the family will be heartily accepted by ornithologists, but it is, on the other hand, probable that his peculiar generic arrangement will meet common opposition.

Mr. Seebohm states (p. viii) that he has "been obliged to fall back upon color or pattern of color as the only character which indicates near relationship."

To see how he has carried this out, let us first take his genus *Geothlypis*, of which he says (p. 148), that it "on the whole must be considered one of the best defined of the family *Turdidae*." One needs only to compare his plates X and XI in order to be convinced that he does not mean the general coloration of the bird, as the two plates represent birds, the general coloration of which is, at least, as different as that of a Robin and a Rock-Thrush, which he refers to different genera. The diagnosis of the genus shows, also, that special importance is attached only to the pattern of the under surface of the wing, these birds "having 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," and the "axillaries parti-colored, the basal half being white and the terminal half black, slate-gray, or brown. Most of the wing-coverts are similarly parti-colored, but the relative position of the colors is reversed, the white portion being on the terminal half." But these characters do not hold good in all species, as Mr. Seebohm himself indicates. There are several exceptions, or, as he calls them, "aberrant species," which have the "axillaries and under wing-coverts uniform in color," and there are several species which he refers to other genera,

but which possess the above characters at least as well determined as his "aberrant" *Geocichla*.

Thus, besides the cases mentioned by Mr. Seebohm himself, "*Turdus pallasi*" has the light color on the inner web "very abruptly defined;" his *Turdus albiventer* likewise has "the pale portions of the inner webs of the quills greatly developed and very abruptly defined," and so further on. But he gives no characters by which these aberrant species (aberrant of both genera) may be distinguished, and he also gives no reason why he places these aberrant forms in different genera. It would be interesting to know why *Turdus albiventer* is not as good a *Geocichla* as *G. sinensis*, when the pattern of coloration is the only character which has generic value; or, in other words, why he does not place *G. sinensis* in another genus. May there not, perhaps, be other characters of more importance and generic value, and which indicate a nearer relationship than the coloration? But one ought not to suspect that, as Mr. Seebohm, in another place, retains a species in the genus *Catharus*, for the reason that its "general style of coloration" so closely resembles the other species of that genus, although it "is a typical *Erithacus* so far as what are called structural characters are concerned." Here, again, "the general style of coloration" is the only generic character of value! In the one genus it thus apparently has no value at all, while in the other it is the only important one! It is curious to see that Mr. Seebohm, when neither pattern nor general style of coloration is sufficient to separate two genera, hastily takes refuge in a structural character; for example, p. 362, and p. 334, and especially the "Key," p. 146, *d'''*, *e'''*, *j'''*, and *g'''*. Curiously enough, he separates two genera, in either of which several species are simply inseparable as to general style and pattern of coloration from certain ones of the other genus, and yet such similarly colored species, he says, are typical members of the other genus, so far as structural characters are concerned! How, then, will Mr. Seebohm tell *Catharus gracilirostris* or *occidentalis* from "*Erithacus*" *luscini* and *philomela*? In coloration *C. occidentalis* and *E. luscini* agree so closely that it would be very difficult to separate them even specifically, if we had no structural characters, and he expressly makes the statement that *C. gracilirostris* is, as to structure, a typical *Erithacus*. We will attempt, by his "Key," to unravel this intricate question. In this the distinctive marks of each genus are given as follows:

- a'''*. General color of under parts slate gray, shading only into brown or white. Legs never black 5. CATHARUS.
- b'''*. Throat generally brilliant in color and frequently in violent contrast to the cheeks; if not, legs pale 6. ERITHACUS.

Unfortunately, the "key" is of no use; both the species of *Catharus* and *Erithacus* mentioned above have *not* a brilliant colored throat; and further, the legs are in both pale, and never black. If no structural differences are to be found, the separation of the two genera would, in

spite of Mr. Seebohm's statement, be hopeless; but, luckily, they may be distinguished by very recognizable and distinct characters; the different construction of the wing, in particular, rendering their separation easy.

A further examination of the birds included in the genus *Geocichla* shows that in several species the sexes are alike, while in others they are very differently colored; but it seems that Mr. Seebohm attaches no importance to this as a character of generic value. We cannot but indorse this view, being much surprised, however, to find that he makes this difference in coloration between the two sexes the chief, not to say the only, distinctive mark of the genera *Turdus* and *Merula*; in some instances carried out to the utmost, while on the other hand several species are included in *Merula* which have the sexes colored alike, and other species showing not unimportant differences between male and female are placed within the genus *Turdus*. In the one case the character is the only valuable one; in the other, again, it has no value at all!

Having adopted the singular theory that structural characters did not indicate natural relationship, while pattern of coloration was sufficient for the purpose, the author has given us a right to expect as the result of his investigations a more natural arrangement than any preceding it. Unfortunately, however, it must be said that he has not succeeded therein, for his own theory is so often and so violently ignored that most of his genera are quite void of definite limits.

It is hardly likely that anyone, be he ever so deeply enamored with the coloration theory, will consider it as according with natural affinities to arrange *T. naevius*, *wardii*, *pinicola*, and *sibiricus* together in one, and *T. maranonicus*, *dryas*, and *pilaris* in another subgeneric group, when, at the same time, such birds as *T. pilaris* and *torquatus* were separated generically. And as the natural relationship in these cases has been violated, so also have they in many others.

It being thus evident that the new mode of defining the genera does not lead to a more natural system than the rejected structural characters, it is to be doubly deplored that the generic groups resulting from its application are so indefinite and their limits so unstable, that Mr. Seebohm (p. 14) needs to appeal to "the instinct of the ornithological student," when he has not been "able to define the character of each genus." This instinct may in most cases be sufficient to "tell a Chat from a Redstart," but certainly it will be of no use when he shall separate a *Turdus* Seeb. from a *Merula* of the same author. The example of Mr. Seebohm himself proves that this instinct is often misleading.

The coloration and the pattern of coloration may, in many cases, be of very great value as indicating the relationship, but used as a distinctive mark for defining genera in the manner of Mr. Seebohm, who often only takes in consideration the colors of the male, it seems to me to have no scientific value at all.

It is an objection against the theory of coloration that in many genera

of birds some species, in their colors, only represent the immature or young state of another species. And as the young and the old birds are frequently very unlike in their coloration, the species thus consequently also look very unlike in their various stages. They may, however, be very closely allied, and often more so, than very similarly colored species. This objection applies also to the matter here under consideration. The first species of *Turdus*, which Mr. Seebohm gives, is *maranonicus* Tacz., from South America. As I have had no opportunity to examine a specimen of this bird, I must content myself with the figure (*Proc. Zool. Soc. Lond.*, 1880, pl. xx). At first sight I was inclined to indorse the view of Mr. Seebohm, and was much perplexed to find a *Turdus* in South America. But, examining the structural characters given in the description, I soon became convinced that the species must belong to *Merula*. I had not to wait a long time before I obtained, to my satisfaction, an interesting proof that this opinion was correct. The same day Mr. Robert Ridgway called my attention to the pl. lxxv. of Sclater and Salvin's "Exotic Ornithology," and pl. xxix. in *Proc. Zool. Soc. Lond.*, 1867, representing the young *Turdus phacopygus* Cab. A comparison with the young bird on Taczanowski's plate shows that these birds are very closely allied and never should be placed in different, even subgeneric, groups. *Merula maranonica* (Tacz.) is evidently an immature bird,* which, perhaps, may later take a plumage more resembling that of the adult *phacopygus*, but I should not be surprised at all if future investigations would prove that it retains the immature-looking plumage also in the adult state. Its place near *M. phacopygus* must, however, be the same in both cases.

There is another work having a very important bearing on the subject to which it is necessary to refer in any dissertation on the arrangement of the American Thrushes, namely, Prof. S. F. Baird's "Review of American Birds." Written sixteen to eighteen years ago it is still the best treatment of the subject extant, and the views expressed therein vindicate their place above more recent essays. And I am glad to say that if I have succeeded in the following arrangement it is due to the most valuable hints which the work above mentioned contains.

As to the limits of the family, I have already remarked that I chiefly agree with Mr. Seebohm. It will, therefore, be perceived that I do not admit the *Miminae*, which Professor Baird in 1864 placed as a subfamily with the *Turdidae*. It seems to me that their proper place is near the Wrens, among which they also had been included by him in his work on the Birds of North America (1858). In fact the Mocking-birds are so closely allied to the *Troglodytidae* that I am inclined to believe that the most natural arrangement would be to include them as a subfamily along with the *Troglodytinae* within the same family.

* I have it on Mr. Lawrence's authority, that Mr. Sclater has determined *T. maranonicus* to be the young of *T. nigricaps*, Jelski, Dr. Stejneger's prediction being thus fully verified.—R. R.

The genus *Cichlherminia* Bp. has especially been regarded as an intermediate link between Thrushes and Mocking-birds. In 1854 Bonaparte divided the genus and made *C. fuscata* the type of the genus *Cichlallopiä*, which name as untenable has been changed by Mr. Selater into *Margarops*. Unfortunately, however, this separation later has been given up,* because the restricted genus *Cichlherminia* (type *herminieri* Lafr.) unquestionably belongs to the true Thrushes, group *Meruleæ*, while on the other hand the genus *Margarops* (including *fuscata*, *densirostris*, and *montana*) as undoubtedly belongs to the *Mimineæ*. (See figs. on pages 457 and 476.) By separating and placing these genera in this manner, the limits between *Turdidæ* and *Mimineæ* become very trenchant, and the arrangement of the families more natural.

Later investigations have confirmed the doubts expressed by Professor Baird (Rev. p. 410) about the validity of the family *Saxicolidæ*. Dr. Coues in his "Birds of the Colorado Valley" (1878), p. 76, still retains the term, but at the same time he very frankly confesses: "Recognition of the family *Saxicolidæ* is purely a conventional matter, in which most ornithologists tacitly agree to follow each other upon no better ground than that of precedent." Mr. Seebohm (*l. c.*) includes the genera *Saxicola* and *Sialia* among the *Turdinæ*. In fact, the *Saxicolidæ* are so closely allied to the Thrushes that they only can claim recognition as a special group within the same subfamily. Moreover, I have distinguished as a separate group the *Sialinæ*, which have formerly been united with the *Saxicolinæ*, but which certainly differ more from the Chats than from the Thrushes. The fact that I have found it necessary to unite with the Bluebirds a species which hitherto has been regarded as a *Turdus*,† shows where their true relations are to be found; the shape of their legs, tail, bill, their habits, and coloration prohibit their position within the same group as the Chats, showing the necessity of establishing for them a separate group, coequal to the groups occupied by the Thrushes and the Chats. Besides, the group *Saxicolinæ*, which only embraces one American species, viz, *Saxicola ænanthe*, by removing the Bluebirds becomes more natural and homogeneous, including, as I now believe, *Saxicola*, *Pratincola*, *Ruticilla*, etc. I cannot agree with the authors of the Catalogue of Birds in the British Museum, who keep the genus *Pratincola* within the family *Muscicapidæ* (vol. iv, p. 178), although it, on the other hand, may be regarded as a well-defined genus in contradistinction to the statement of Mr. R. Collett. (Chr. Vid. Selsk. Forh., 1881, No. 10, p. 3.)

It will be seen that the following arrangement differs from that of most systematists in separating *Turdus merula* and its allies as a group, *Meruleæ*, distinct from and coequal to the *Turdæ* and *Luscinicæ*, and in

* See Selater and Salv., Nomencl. Nr. Neotrop, p. 2, and Sharpe, Cat. Birds Brit. Mus., VI, p. 326.

† By Mr. Seebohm, however, included together with other heterogeneous elements among the genus *Geocichla*, subgeneric group *Hesperocichla* (*op. cit.*, p. 151).

including with the latter group the genus *Catharus*, which usually has been placed among the Thrushes.

At first sight it would seem that the *Meruleæ* and *Turdæ* are too closely related to constitute separate groups, the more so as there are few authors who distinguish the species of the two groups even generically. But the trouble of the prior attempts has been that the limit between the two groups has been so traced that each division has contained species really belonging to the other group. Thus, the *Turdus torquatus* has almost unanimously* been regarded as a true *Merula*, closely allied to the type of this genus, only because its color is black. A careful examination shows, however, that the Ring-Ouzel, so far from being an ally of *Merula nigra*, is a near relative of *Turdus viscivorus*, the type of the restricted genus *Turdus*. It is, then, a matter of course that it has been impossible to separate satisfactorily the two groups even generically or subgenerically. But if all heterogeneous elements be removed and put in their proper places, the differences between *Turdæ* and *Meruleæ* become very striking. In fact, the *Merula nigra* is at least as remote from the true Thrushes as is *Erithacus rubecula*, and the adoption of the group *Luscinieæ* (by most ornithologists admitted as family or subfamily on the same reasons as the *Saxicolideæ*) therefore necessitates the establishment of a co-ordinate group embracing the genus most nearly allied to *Merula*.

As has already been remarked, the genus *Catharus* will usually be found placed very near the true Thrushes, especially to the smaller North American species of the genus *Hylocichla*, and Mr. Seeböhm goes even so far as to include *Catharus dryas* within the same subgeneric groups, embracing *Hylocichla musica*, *mustelina*, *Turdus viscivorus* and *pilaris*, chiefly, or rather only, on account of the dark spots on the under surface. I have found it, however, quite impossible to remove them from the *Luscinieæ* (genus *Erithacus*, Seeböhm), with which they agree in the very important character of the structure of bill, wing, and legs, and also in the colors of the plumage. Notwithstanding the *Cathari* point towards the true *Turdæ*, while many of the old world *Luscinieæ* show a similar tendency towards the *Meruleæ*, so that the proper place of the group *Luscinieæ* will be between those two, thus fairly illustrating the gap between *Turdæ* and *Meruleæ*.

In 1866 Professor Baird (*op. cit.* p. 417) established the subfamily *Myiadestineæ* in the following words: "I am decidedly of opinion that, notwithstanding a close resemblance in general appearance, *Myiadestes*

* The only noteworthy exception is Prof. J. Cabanis, who, in his "Journ. für Ornith." 1860, p. 161, foot-note, says: "*Turdus torquatus* should not be placed with *Merula*, but must, with respect to the shape of bill and wing, remain with *Turdus*."

I find no better place for correcting a very curious mistake in Gray's Handbook of Birds, i, p. 253, in which the subgenus *b* of genus *Turdus* has received the name "*Psophocichla*, Herang. 1860." The memoir of Cabanis, quoted above, has the heading, "Eine neue Drossel-Gattung, *Psophocichla*. Vom Herausgeber"—a new genus of Thrushes, *Psophocichla*. By the editor, and hence the error.

and *Cichlopsis* should be removed from their usual association with *Ptilogonys*, among *Ampelidæ*, to, or at least very near, the *Turdidæ*, and form a subfamily with *Platyichla*. The latter genus is so closely related to *Cichlopsis* as almost to be the same; *Platyichla* forming the link with *Turdinæ* through *Planesticus*, while such species as *Myiadestes unicolor* show the affinities of *Cichlopsis* to *Myiadestes*." But so far as I can detect, Dr. Elliott Coues is the only author who, in his "Birds of the Colorado Valley" (1878), has adopted the view of Professor Baird, including the subfamily *Myiadestinae* within the family *Turdidæ*. I have been much surprised to find those birds excluded by Mr. Seebohm, who has so nicely pointed out the value of the spotted plumage of the young *Turdidæ*, and of the coincidence of this character with smooth tarsi, and on the other hand to find them treated by Mr. Sharpe under the *Timeliidæ*.* The essential character of this latter group is their short and concave wing. But it is evident that the wing of the *Myadestinae* does not in any respect differ from the structure of the wing of the *Turdinæ*, being rather longer than the average of the latter group, and as flat and straight. The relationship between the *Merulæ* of the true Thrushes, and the *Platyichlæ* of the "Flycatching Thrushes" (Coues) is so close, indeed, that several species, which really belong to the latter group, are usually found—also in the new "Catalogue of the Birds in the British Museum"—included in one of the genera composing the former division.

The earlier placing of these birds within the *Ampelidæ* is only due to their "resemblance in general appearance," and the differences have already been pointed out so exhaustively by Professor Baird, that it is unnecessary to repeat them here. The group will not, however, be naturally limited or clearly defined without removing the species *Myadestes leucotis* (Tschudi), which is widely different, from the *Myadestinae*, being a true member of the *Ptilogonatidæ*. As its characters do not agree with those of any other genus, it will be necessary to make it the type of a new genus.†

It will be seen that in the following arrangement I have attached much importance to the form of the wing. It is certainly true, that in the *Passeres*, the more pointed wings very often indicate migratorial

*As to the latter, it is proper to state that he himself is not content with the place thus attributed to the *Myadestinae*. Here are his own words (*tom. cit.* p. 368): "The present position of the birds contained in this subfamily is not satisfactory to my mind. * * * Mr. Seebohm has not admitted them into his volume of the 'Catalogue.' I have, therefore, placed them near the Mocking-Thrushes, which they resemble in their power of song."

† ENTOMODESTES, *n. g.*

(*Εντομα*=insects, *ἔδεται*=an eater).
Type—*Entomodestes leucotis* (Tschudi)—

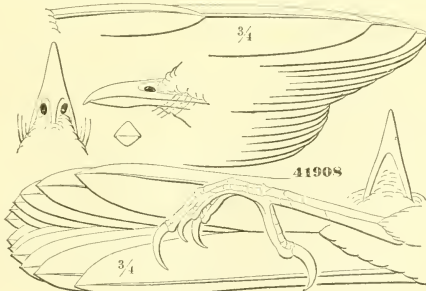
Head without crest. Outer primaries broad, not attenuated nor pointed at end; 1st about half the 2d. Tail graduated, the feathers acute and acuminate at tips, the

habits, while the more rounded wings are oftener found in stationary birds. This fact, however, does not in any way diminish the value of the structural difference as a distinguishing mark, the purpose of which is to indicate the limits of the different genera; nor is it without importance in indicating the affinities of the different forms. In so far as it is connected with the migratory habits of certain species, it probably signifies the simultaneous immigration of those birds into the region to which they now belong, and indicates thus a geographical separation which, during the course of time, cannot have been without influence on their development.

That the more or less rounded or pointed form of the wing has not such an essential importance in regard to the migratorial phenomenon is evident from the general consideration, that not all migratory birds have long and pointed wings. It is also to be remarked, that in general the same species is migratory in some localities, while in other places it is stationary. Finally, we have in the group of birds here under consideration ample opportunity for showing instances which point to quite the opposite direction. So, for example, has *Ridgwayia pinicola*—which certainly is not a migratory bird, and the geographical range of which is remarkably restricted very pointed wings, with the 3d and 4th quills longest, and very short secondaries. We have also the genus *Sialia*, with its unusually lengthened and pointed wings.

On the other hand, the length of the secondaries and of the primary coverts seems to be of very great importance. Nor is their length in any way directly dependent upon the migratory or stationary habits of the birds, though it may certainly be admitted that longer secondaries

outer tapering from about its middle. Bill somewhat lengthened, rather weak, broad at base; nostrils large, rounded, much exposed; frontal feathers not reaching by far to the posterior margin. Tarsus scutellate anteriorly, as long as middle toe and claw.



Myiadestes leucotis, Cab.

Professor Baird states that the tarsus is "without distinct scutellar divisions anteriorly except below," but a close examination shows that there is a well marked division straight above the upper division of the outer side. The accompanying figure, No. 41,908, is also less correct in another respect, showing the nostrils too near the feathers of the forehead.

and shorter primary coverts usually are connected with rounded wings, and *vice versa*. We may also find many instances which prove that such a law for the construction of the wing does not exist.

Considering the great importance of the number of the primaries of the *Oscines*, and the deep-seated affinities expressed by the characteristic position of the middle wing-coverts, it is difficult to escape the impression that the construction of the wing is of especial importance in determining the relationships of the highest organized birds. As this difference in the construction usually consists in different development of one part in relation to others, it generally becomes a character rather easily expressed in words and represented by figures; thus being of great advantage to those who try to fix the limits of the different groups by means of structural characters.

It will be unnecessary to point out the impossibility of expressing all the manifold and intricate relationships of the genera by arranging them in a straight line. It is, consequently, a matter of course that the succession of the genera in the following synopsis expresses only to a certain degree their mutual relations. It may also be considered that the omission of the Palaeogean forms makes the series incomplete. At first it was my intention to give a diagram showing the affinities, but, in view of the imperfectness of such an attempt, without including all old-world genera in addition to the American ones, I have thought it better to put it off to a later time.

On the other hand, the characters of the sections and genera given below are intended to embrace all forms belonging to them, and not only those occurring in America. If I have not always succeeded herein it is partly due to the relatively scarce material, which represents only a fraction of the extra-American birds.

As to the nomenclature and the manner of quotation, I only refer to my remarks in my paper, in Proceedings of the U. S. Nat. Mus., vol. 5, 1882, p. 29. It will be seen that examples strengthening the views there expressed are to be easily found in the present memoir. As a very striking one, I refer to the foot-note given under *Myadestes*, showing the character and the uselessness of philological "emendations" in ornithological nomenclature.

Before concluding these remarks, I take the opportunity of thanking my friend Robert Ridgway for his most valuable assistance, without which I should never have attempted the following essay.

I have also to acknowledge my indebtedness to the authorities of the Smithsonian Institution and United States National Museum for the opportunity of examining the collections upon which this paper is largely based.

WASHINGTON, D. C., *March 20, 1882.*

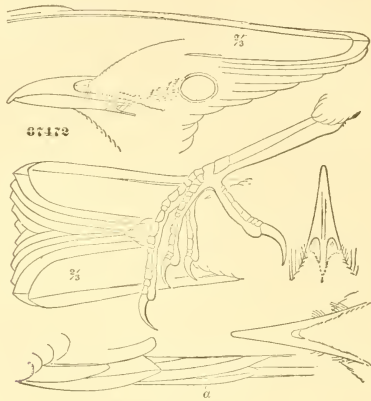
SYNOPSIS OF THE SUBFAMILIES AND GROUPS OF THE AMERICAN
TURDIDÆ.

- a*¹ Gonyes more than one-third the commissure; chin-angle not anterior to the line of the nostrils, or else the commissure very arched. Bill stouter, more lengthened, narrower at base and more compressed; width at base usually less than distance from nostril to tip; commissure very seldom more than twice the same distance A. TURDINÆ.
- b*¹ Wings not shorter than five times the tarsus. Tarsus very short, never longer than middle toe with claw, or commissure. Second primary often longer than the fifth; sometimes longer than the fourth. Wings covering more than two-thirds of the tail 1. *Sialicæ*.
- b*² Wings not more than four and three-fourths times the length of the tarsus. Tarsus moderate or long, never shorter than middle toe and claw, or commissure. Second primary seldom longer than fifth, never longer than fourth. Wings not covering more than two-thirds of the tail.
- c*¹ Culmen generally decidedly concave just before the nostrils, or, if straight, the commissure is also straight. Tail usually short, square, or emarginated 2. *Saxicoleæ*.
- c*² Culmen generally arched from the base; if straight at the base, the commissure very arched, or more or less abruptly bent downwards behind the nostrils.
- d*¹ Second primary more than four times longer than the first; usually longer than the sixth and equal to the fifth. Distance from the tip of the longest primary to that of the longest secondary generally longer, and not shorter, than the distance from the latter point to the tip of the longest of the greater wing-coverts. 3. *Turdæ*.
- d*² Second primary not longer than four times the first, or else the tail three times the tarsus; usually shorter than the sixth. Distance from the tip of the longest primary to that of the longest secondary generally shorter, and not longer, than the distance from the latter point to the tip of the longest of the greater wing-coverts.
- e*¹ Tarsus more than twice the length of the exposed culmen. 4. *Luscinicæ*.
- e*² Tarsus not more than twice the length of the exposed culmen. 5. *Merulæ*.
- a*² Gonyes only one-third the commissure or less; chin-angle always anterior to the line of the nostrils; commissure rather straight; bill shorter, more depressed; mouth deeply cleft; width at base greater than twice the distance from nostrils to tip; commissure more than twice the same distance B. MYADESTINÆ.
- b*¹ Tail feathers never four times as long as the commissure 6. *Platyichlææ*.
- e*² Tail feathers four times as long as the commissure or longer 7. *Myadestææ*.

Group SIALLE.

Synopsis of the genera.

- a*¹ Gonys very short, being shorter than two-fifths of the commissure, so that the chin-angle is considerably produced before the line of the nostrils. Tail double rounded1. *Ridgwayia*.
 Tail double rounded1. *Ridgwayia*.
*a*² Gonys moderate, being longer than two-fifths of the commissure, so that the chin-angle does not reach before the line of the nostrils. Tail slightly forked.....2. *Sialia*.



Ridgwayia pinicola.

RIDGWAYIA* Stejneger.

Type *Ridgwayia pinicola* (SCLAT).

Body of moderate size, with light spots on the fore parts. Wings proportionately long, and pointed, with long primaries and shorter secondaries; the first primary is placed in front of, but almost on the outside of the second, the inner web of it lying concealed between this and the primary coverts. Bill much arched, lower jaw decidedly concave; commissure with a distinct notch, and much curved, so that the whole mandible, with exception of the base, falls inside of the straight line between its tip and the angle of the mouth; lower jaw very weak; gonys very short, being shorter than two-fifths of the commissure, so that the chin-angle is considerably produced before the line of the nostrils. Bristles along gape proportionately few. Tarsi stout and exceedingly short, being shorter than the commissure, and shorter than the middle toe with claw, only making one-fifth of the length of the wings. Middle toe

*I have great pleasure in naming this remarkable genus in honor of Mr. Robert Ridgway, to whom the science is so highly indebted for his many eminent productions within all branches of American ornithology.

somewhat lengthened, the terminal joint especially so. Tail double rounded, the two outermost feathers being much shorter than the others.

REMARKS.—This genus embraces only one known species, the range of which is very restricted, being found only in the high table-land of southern Mexico.

The bird forming the type of the present genus has not been removed from the genus *Turdus* by any author except Mr. Seebohm. The place given to it by him within the genus *Geocichla*, "subgeneric group '*Hesperocichla*,'" is, however, by no means an improvement. *Geocichla* and the nearest allied forms are exclusively Old World and Australian birds, which have no true relatives within the Neogean part of the world, the *Hesperocichla navia* being as badly placed among the Ground-Thrushes as the bird here under consideration. The main reason of Mr. Seebohm for placing the *R. pinicola* among these birds seems to have been the pattern of its wing, although he candidly admits that the pattern of the axillaries is not typical. Any one who will take the trouble of comparing the bird here under consideration with a young *Sialia*, will soon convince himself that the two genera should not be removed far from each other, even if he embraces the doctrine that the coloration is the only character of importance in regard to relationship. A close comparison of the structural features of both genera corroborates this view. The long and pointed wings, the short tail, and the exceedingly short tarsi, make the *Ridgwayia* widely distant from the *Turdus* and *Merula*, closely resembling in these respects the *Sialia*. Besides, it will be remarked, that the geographical distribution of the two genera agrees very well, thus making the *Sialia* a nicely circumscribed group in this respect also.

From *Sialia* the *Ridgwayia* is easily distinguished by the more lengthened bill, the short gonys, and the double-rounded tail. Indeed it is one of the best defined genera of the whole family.

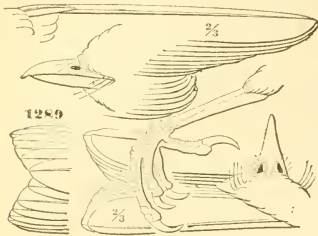
SIALIA Swains.

- =. 1827.—*Sialia* Swains. Zool. Journ. III (p. 173). (Type *Motacilla sialis* L.)
(*nec* Selby, 1831).
=. 1839.—*Sialis* Lafresn. Rev. Zool. 1839, p. 162. (Same type) (*nec* Latr.,
1803).

Smaller size; predominant color blue and chestnut, in the adults unspotted. Wings very long and pointed, with long primaries and short secondaries; first primary normally placed, with tendency, however, to the same position as in *Ridgwayia*, very short, not one-fourth the second. Bill short, stout, compressed at the tip; commissure with a distinct notch, and more or less curved; gonys of ordinary length, so that the chin-angle is not produced before the line of the nostrils. Nasal fossæ filled with bristly feathers, only the openings of the nostrils being exposed; bristles along gape more or less developed. Tarsi stout and

very short, being about of the same length as the commissure and the middle toe with claw, only making one-fifth of the length of the wings.

Toes stout, the middle one not unusually lengthened. Tail moderate; slightly forked.



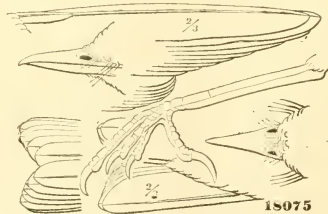
Sialia sialis.

figure given by Wolf in Gray and Mitchell's "Genera of Birds" (I, pl. 50, fig. 3) is correct, the *Grandala* is a widely different genus, characterized, in contradistinction to *Sialia*, by the rictal bristles being obsolete, by the lengthened bill, and the exposed openings of the nostrils, the fore part of the membrane of which is not covered by feathers, also by the scutellated and lengthened tarsi, which are considerably longer than the middle toe. Besides, the toes are stated to be slender, and the tail to be strongly emarginated. It appears to me that *Grandala* is badly placed even within the same group as *Sialia*. I cannot think it will be impossible to find a more proper place near one of the Old World forms, although I shall not make any attempt without having examined the bird itself.

Group SAXICOLEÆ.*

SAXICOLA Bechst.

- <1803.—*Saxicola* Bechst. Orn. Taschenb. p. 216 (nec Forster, 1817).
 1816.—*Vitiflora* Leach. Cat. Mam. Birds Brit. Mus. p. —.
 1817.—*Euanthe* Vieill. Analyse, p. 43.
 1822.—*Rupicola* Naumann. Nat. Vög. Deutschl. ii, p. iv (nec Briss).
 1823.—*Euanthe* Vieill. Faune Franç. p. 31.



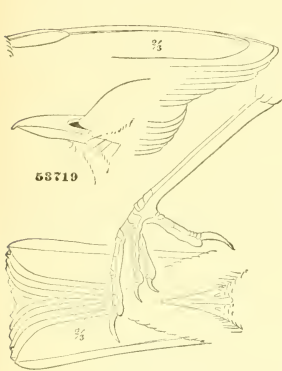
Saxicola euanthe.

* Dr. Stejneger was not given time to prepare his remarks on this group. It embraces but one American genus, however (*Saxicola* Bechst.), the synonymy of which is given above. Other genera which he would refer to this group are the "Palæogean" *Pratincola* and *Ruticilla*, but whether he would include others, I do not know.—R. R.

Group TURDEÆ.

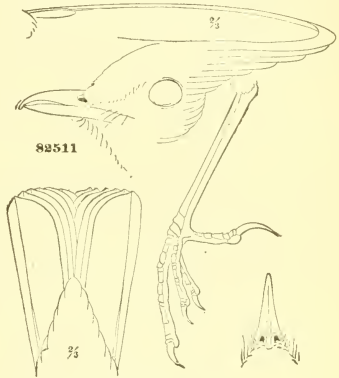
Synopsis of the American genera.

- a*¹. Fore part of the nasal fossæ bare, and nostrils never concealed with bristles.
*b*¹. Wing never longer than three and a half times the length of the tarsus *Hylocichla*.
*b*². Wing never shorter than four times the length of the tarsus *Turdus*.
*a*². Whole of the nasal fossæ feathered, and the nostrils nearly concealed by stiff bristles *Hesperocichla*.



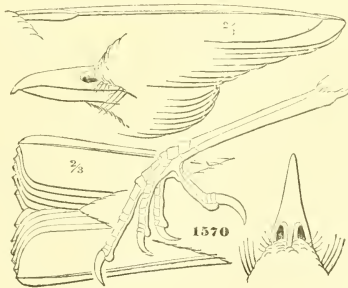
53719

Hylocichla pallasi.



82511

Hylocichla fuscescens.



1570

Hylocichla mustelina.

HYLOCICHLA Baird.

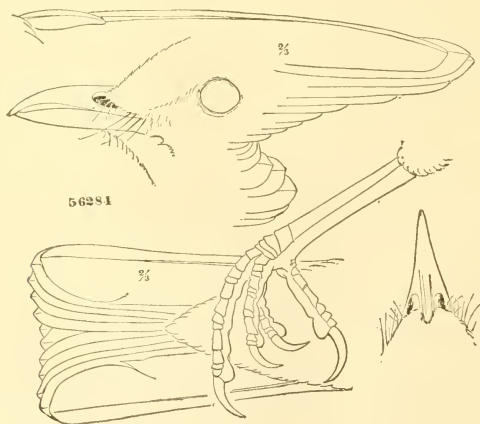
- <1758.—*Turdus* Lin. Syst. Nat. x ed. i, p. 168.
 ×1860.—*Iliacus* Des Murs. Traité Ool. Ornith. p. 292. (Type *iliacus*.)
 >1864.—*Hylocichla* Baird. Rev. American Birds, p. 12. (Type *mustelinus*.)

Small, spotted Thrushes, with long and pointed wings, the third and fourth primaries being the longest; with short first primary, arched

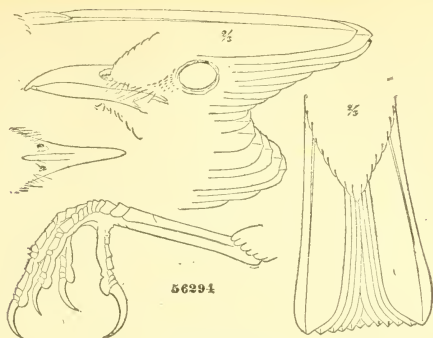
culmen, moderate gonys, this being about half as long as the commissure, which has a distinct subterminal notch. The bill is short, broad at base, and much depressed. The fore part of the nasal fossæ naked, and the nostrils never covered by bristles. Tarsus long and slender, never shorter than two-sevenths of the wing, and always much longer than the commissure; outstretched legs reaching nearly to the tip of the tail.

REMARKS.—This group of smaller Thrushes is, I think, entitled to generic rank. Originally intended to embrace the North American species, it has later been shown that the *Turdus musicus* of the Old World is a true member of the group. Mr. G. R. Gray (Handb. of Birds, i, p. 254), unfortunately, however, at the same time included in it the *Turdus iliacus*, which only comes near to the *H. musica* in size and general appearance, thus embroiling the limits and discrediting the validity of the genus.

Not having seen any specimens, I am unable to decide whether we will have to enlist a *Hylocichla aurita* Verreaux or not. Verreaux's bird has been thought to be the eastern representative of the common European Song-Thrush, and if such be really the case it is very likely that its proper place is within this genus.



Turdus viscivorus.



Turdus iliacus.

TURDUS Lin.

- <1758.—*Turdus* Lin. Syst. Nat., x ed., i, p. 168.
- ×1816.—*Merula* Leach. Cat. Mamm. Birds, Brit. Mus., p. 20.
- >1829.—*Copsichus* Kaup. Entwg. Eur. Thierw., p. 157 (nec *Copsychus* Wagl., 1827). (Type *torquatus*.)
- >1829.—*Irocossyphus* Kaup. Op. cit., p. 145. (Type *viscivorus*.)
- >1829.—*Arcenthornis* Kaup. Op. cit., p. 93. (Type *pilaris*.)
- >1829.—*Cichloides* Kaup. Op. cit., p. 153. (Type *atroregularis*.)
- >1850.—*Thoracocinclia* Reichb. Av. Syst. Nat., pl. liiii. (Type *torquatus*.)
- >1854.—*Cichloselys* Bonap. Nat. Coll. Delattre, p. 29.
- >1856.—*Cychloselys* Bonap. Catal. Parzud., p. 5.
- >1856.—*Planesticus* Bonap. ut supra (nec 1854).
- ×1860.—*Iliacus* Des Murs. Tr. Ool. Ornith., p. 292.
- ×1869.—*Hylocichla* G. R. Gray. Handb. of Birds, i, p. 253.

Larger, spotted Thrushes, with wings almost as in the foregoing genus. The feathering of the nasal region and the form of the bill are also the same, with the exception that the latter is stouter and higher. Tarsus stout and of moderate length, never being longer than two-eighths of the wing, but longer, however, than the commissure; out-stretched legs fall far short of the tip of the tail.

REMARKS.—The genus *Turdus* thus restricted forms a natural and rather well defined group, embracing, besides a few additional species from Eastern Asia, the following members of the west Palæarctic ornith: *T. viscivorus*, *pallidus*, *torquatus*, *pilaris*, *obscurus*, *iliacus*, *atroregularis*, *fuscatus*, *naumanni*, and *ruficollis*.

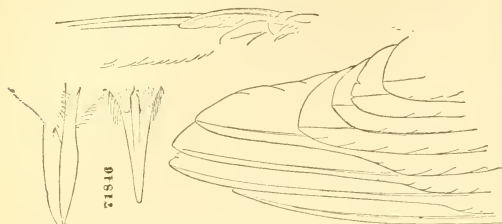
This genus, which is a strictly Palæarctic one, is entitled to admission into a synopsis of the American genera only on account of the accidental occurrence of *Turdus iliacus* in Greenland.

HESPEROCICHLA Baird.

- =1858.—*Ixoreus* Baird. Birds of North Amer. p. 219 (nec Bp. 1854).
- =1864.—*Hesperocichla* Baird. Rev. Amer. Birds, p. 12. (Type *navia*.)

Body stout, only very little spotted. Wing much as in the foregoing genera, the second primary, however, being considerably shorter than

the fifth. Bill more subulate, narrow at the base, with considerably curved commissure, and inflated tomia; gonys long, being longer than half the commissure, which only very exceptionally has a subterminal notch.

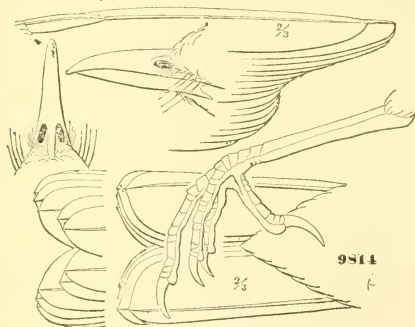


The covering of the nasal fossæ is completely filled by feathers, and the openings of the nostrils concealed by a considerable number (about 7) of stiff bristles;

besides, the bristles along the gape are much more developed than in other Thrushes. Tarsus stout, of moderate length, shorter than two-eighths of the wing, but still longer than the commissure; outstretched legs fall far short of the tip of the tail.

REMARKS.—*Hesperocichla* is as well defined a genus as any within the family, and needs not to be degraded to the lower rank of a sub-

genus. It certainly only embraces one species, but I see no reason for the increasing displeasure at genera containing few species, as little as I take satisfaction in the not uncommon practice of subdividing a genus only on account of the great number of its species.



Hesperocichla nœvia.

The main marks distinguishing this genus from the other members of the group *Turdæ* are given above, these characters, indeed, as also the style of the coloration, being almost unique in the whole family. It is thought, however, that the relationship is rather with the true Thrushes than with any other genus. Their remoteness from the other forms is also expressed in the restricted geographical distribution of the present bird, which only inhabits the Pacific region of North America.

[Fig. 9814 gives an entirely erroneous view of the nostrils, which is corrected in the accompanying figure, in which the situation of the outer webs of the primaries and the form of the spurious primary are shown also.—R. R.]

Dr. E. Cones (Birds of the Colorado Valley, I, p. 15), remarks that the young is "like the adult female," and that "no speckled stage, like that of the very young Robin has been observed, though August speci-

mens have been examined." But it is only apparently, what this statement seems to indicate, that the young is not speckled at all, thus differing from all the other members, and wanting the most essential character. I have now before me a specimen (U. S. Nat. Mus., No. 45897, Sitka, August, 1866) which differs considerably from the adult female. The under surface is of a much duller color, without white on the belly and under tail-coverts. All the feathers of the chin, throat, and upper breast, with well-marked, blackish edges, giving these parts a scaly appearance. In the adult female the feathers forming the collar are almost uniformly dark, the edges being lighter, if any, while the feathers of the above-mentioned parts of the young bird are gray and downy at their basal half, then ochraceous yellow, and, finally, narrowly edged with blackish. The feathers of the upper parts in the young have no light centers as usually among the Thrushes, except on the sides of the neck and on the head, where the middle of the feathers are more or less conspicuously marked with a lighter spot. Finally, we have a very striking difference between the adult and the young, showing the common Thrush-like feature of the plumage of the latter, the smaller wing-coverts having wedge-shaped, rusty spots towards the tip and dark edgings, while in the adult bird they are absolutely uniform in color. It will thus be seen that the speckled stage is not altogether wanting in this genus, although it may be admitted that it is not so conspicuous as in the young Robin. This fact seems to me to strengthen my view, that the present bird, notwithstanding a certain resemblance of the predominant colors and their tone, is widely remote from *Merula migratoria*, in the neighborhood of which it has been placed by many authors.

Group LUSCINIÆ.

Synopsis of the American genera.

- a¹ Feathers of the upper head elongated, forming a more or less distinct crest. Outer web of the outermost tail-feather not widened towards the tip, the shaft and the outline of the web being parallel. Toes more or less stout..... *Catharus*.
- a² Head without crest; outer web of outermost tail-feather widening towards the tip. Toes very slender..... *Cyanocula*.

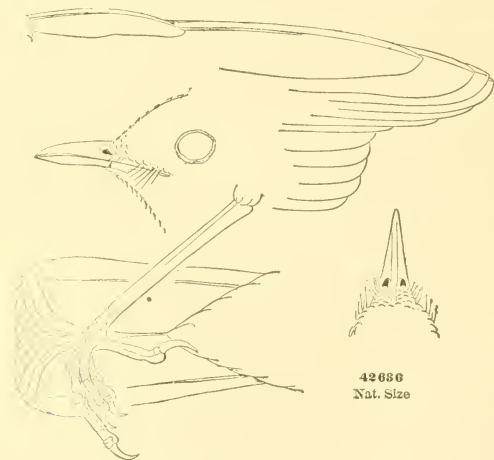
CATHARUS Bonap.

- = 1850.—*Catharus* Bonap., *Consp. Av.*, I, p. 278. (Type *immaculatus*.)
- > 1854.—*Malacocichla* Gould, *Troc. Zool. Soc.*, Lond. 1854, p. 285. (Type *dryas*.)
- > 1856.—*Malacocychla* Bonap., *Compt. Rend.*, lxiii, p. 998.

Wing short, rounded, and concave, with long secondaries; first primary between four-eighths, and four-sevenths the second, which is always shorter than the seventh, the fourth and fifth being the longest. Culmen arched, seldom straight at the base; commissure arched, with a distinct subterminal notch; bristles more or less developed. Tarsi long,

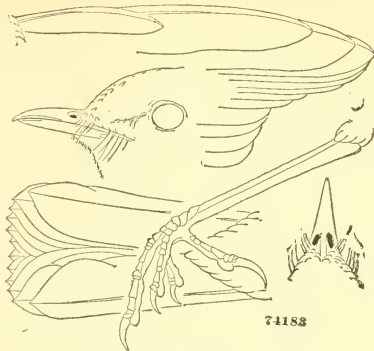
more or less stout, a little more than twice the length of the exposed culmen, and one and a half to one and three-fourths the length of the commissure, making about half the length of the tail. Toes more or less stout, the claws very arched and stout. Tail slightly rounded, the outer web of the outermost quill not widened towards the tip, the shaft and the outline of the web being parallel. Plumage soft and full, the feathers of the upper head being elongated, forming a more or less distinct crest.

REMARKS.—I have not been able to find any important difference between the species included within the genus *Malacocichla* Gould, and the typical *Cathari*. The difference is chiefly and alone to be found in the color, the former group having the throat and upper breast spotted, somewhat like the smaller species of *Hylocichla*, with which they, in fact, have been put together by Mr. Seeborn. They differ, however, widely from these in most respects, being structurally quite identical with the other species composing the genus here in question.



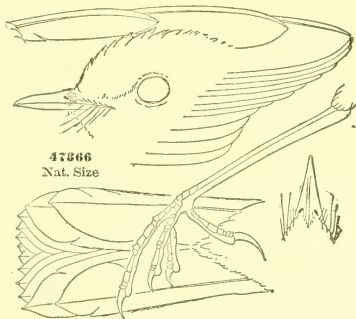
42686
Nat. Size

Catharus dryas.



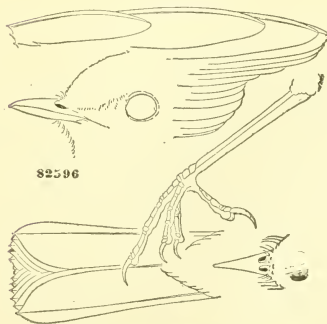
74188

Catharus melpomene.



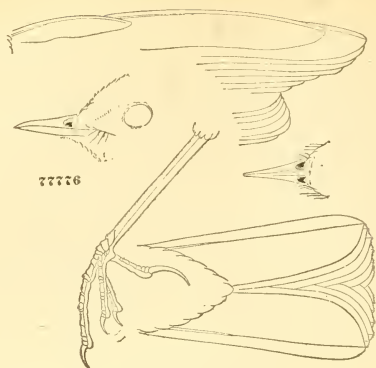
47866
Nat. Size

Catharus gracilirostris.

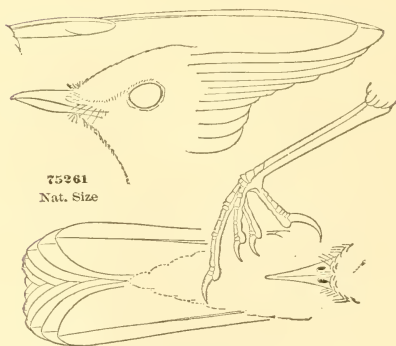


82596

Erithacus rubecula.



Cyanecula suecica.



Luscinia philomela.

CYANECULA Brm.

- <1758.—*Motacilla* Lin., Syst. Nat. x ed. I, p. 184.
- <1760.—*Ficedula* Briss., Orn. III, p. 369.
- <1769.—*Sylvia* Scop., Ann. I, Hist. Nat. p.
- <1799–1800.—*Erithacus* Cuv. Leç. d'Anat. Comp. I, Tabl. ii.
- <1822.—*Humicola* Naumann, Naturg. Vög. Deutschl. II, p. iii.
- <1826.—*Dandalus* Boie, Isis, 1826, p. 972.
- =1828.—*Cyanecula* Brm., Isis 1826 (p. 1280). (Type *suecica*.)
- =1833.—*Tandicilla* Blyth, Renn. Field Nat. I (p. 291).
- =1857.—*Cyanegula* Boie, Journ. Orn. 1857, p. 166.

Wing moderate, rather pointed, with proportionately short primaries; first primary less than one-third the second, which is about of the length of the sixth, and always shorter than the fifth and longer than the

seventh, the third being the longest. Bill slender, with the culmen straight and the commissure arched at the base, and with the subterminal notch obsolete; bristles few and weak. Tarsi long and slender, two and two-third times the length of the exposed culmen, and one and four-fifths times the length of the commissure, making about two-fifths of the length of the tail. Toes long and very slender, the claws being unusually straight, small, and slender. Tail nearly even, the outer web of the outermost quill widening towards the tip. Plumage compact; head without crest.

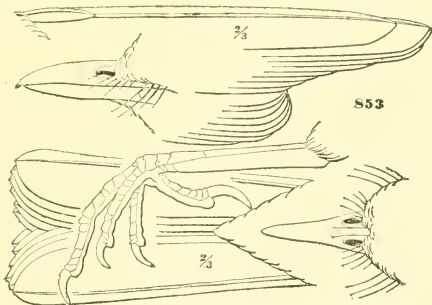
REMARKS.—This genus is included here in account of the supposed occurrence of *Cyanecula suecica* (Liu.) in Alaska.

The characters, as given above, are sufficient to distinguish these birds from both *Erithacus*,* *Luscinia*,† and *Calliope*. Notwithstanding an external resemblance to *Phœnicurus*, it certainly belongs to this group and not to the *Saxicoleæ*.

Group MERULEÆ.

Synopsis of the American genera.

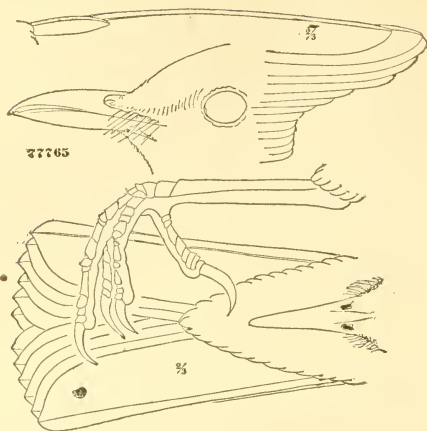
- a*¹ Tail not graduated; the tail-feathers considerably shorter than the wing.
- b*¹ Tail-feathers more than two and a half times the length of the tarsus.
 - c*¹ Third, fourth, and fifth primaries largest, or else the tail square. . . . *Merula*.
 - c*² Fourth, fifth, and sixth primaries largest, and the tail much rounded *Semimerula*.
- b*² Tail-feathers only twice the length of the tarsus. *Cichlherminia*.
- a*² Tail graduated; the largest tail-feathers about of the length of the wing *Mimocichla*.



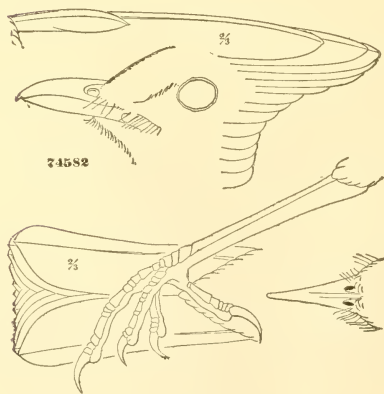
Merula migratoria.

* *Erithacus* Cuv., *Leç. d'Anat. Comp.* I (1799-1800), tabl. ii. A true synonym of this is *Helminthophaga* Bechst. *Orn. Taschenb.* (1803), p. 177 cf. pp. 507 and 548 (*nec* Cab. quæ *Helminthophila* Ridg.). It was an error when I informed Mr. Ridgway that Bechstein included the Nightingale within this subgenus. Cf. *Bull. Nutt. Orn. Club*, 1882, p. 53.

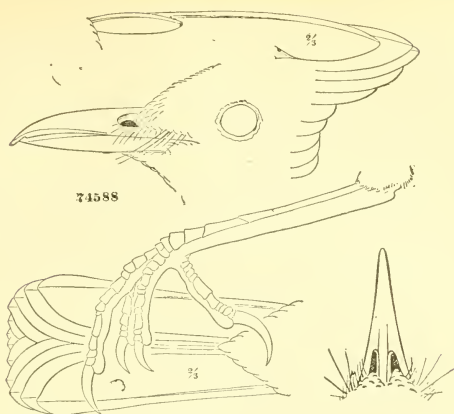
† *Luscinia* Forster, *Syn. Cat. Brit. Birds* (1817), p. 14, is prior to *Dandalus* of Boie.



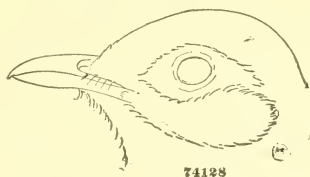
Merula nigra.



Merula jamaicensis.



Merula (?) aurantia.



74128

Merula gymnophthalma.

MERULA Leach.

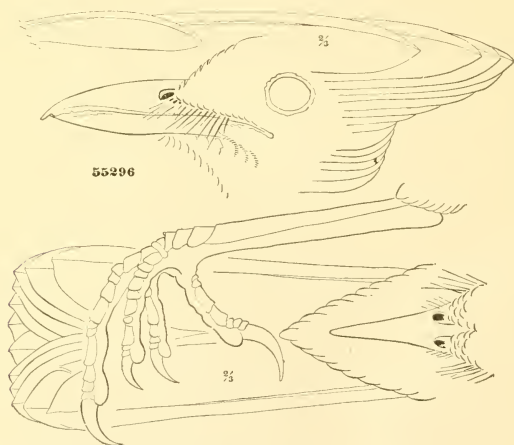
- <1758.—*Turdus* Lin., Syst. Nat. x ed. I, p. 168.
- <1816.—*Merula* Leach, Cat. Mamm. Birds Br. Mus. (p. 20) *nec.* Koch, 1816, quæ *Pastor.*
- >1850.—*Hodoiporus* Reichb., Syst. Av. pl. LIII. (Type *jamaicensis.*)
- >1854.—*Planesticus* Bonap., Coll. Delattre, p. 27 (*nec* 1856).
- >1855.—*Cichlopsis* G. R. Gray, Cat. Gen. Birds, p. 43 (*nec* Cab. 1850). (Type *aurantius* Gm.)
- +1859.—*Semimerula* Sclater, Proc. Zool. Soc. Lond. 1859, p. 332.
- +1881.—*Merulissima* Seebohm, Cat. Birds Br. Mus. V, p. 232.

Size large or moderate; color more or less uniform, often black or blackish in both sexes; when streaked, only the throat is marked with dark streaks. Wing rounded, the third, fourth, and fifth primaries being longest, the third not commonly longer than the fifth; second primary not longer than four times the first; secondaries long, the distance from the tip of the longest primary to that of the longest secondary never being longer than the distance from the latter point to the tip of the longest of the greater wing-coverts. Bill stout; culmen arched from the base; commissure with a distinct subterminal notch, and not

longer than two and a half times the moderate gonyx; chin-angle not reaching before the line of the nostrils. Bristles along gape moderate in strength and number. Tarsus stout and moderate in length, never longer than twice the exposed culmen. Tail square or only slightly rounded; the tail-feathers more than two and a half times the length of the tarsus, but shorter than three and a half times the same length and considerably shorter than the wing.

REMARKS.—At the first sight this genus will appear somewhat heterogeneous, including such different looking birds, as *Merula nigra*, *migratoria* and *jamaicensis*. These differences are, however, only superficial and due to the color, but it will not be difficult to arrange the numerous species of this genus, which has representatives all the world over, but the chief range of which seems to be the tropical regions, in one series, showing nicely the transitions from the deepest black to the lightest rusty, and from the quite uniform to the most varied colored bird. As to the *M. aurantia* (Gmel.), from Jamaica, I have expressed my doubts under *Semimerula*, to which remarks I here refer.

SEMIMERULA Scat.



Semimerula gigas.

<1859.—*Semimerula* Scater, Proc. Zool. Soc, Lond. 1859, p. 332.

<1881.—*Merulissima* Sceböhm, Cat. Birds Br. Mus. V, p. 232.

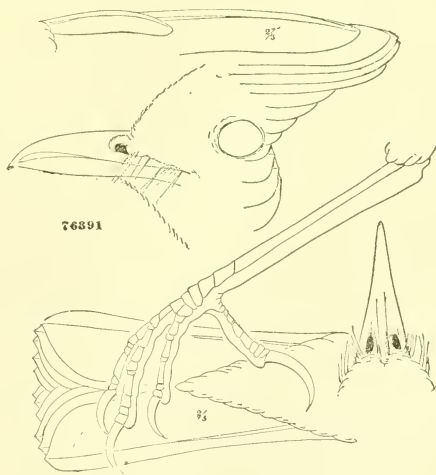
Size large; color uniform blackish or dull brownish. Wing very rounded, the fourth, fifth, and sixth primaries being longest, the third never longer than the fifth; second primary never longer than two and a half times the first, never longer than the eighth; secondaries as in *Merula*. Bill very large and stout, being otherwise much like that of

Merula. Bristles along gape strong and numerous. Tarsus very stout and somewhat lengthened, never longer, however, than two and a half times the exposed culmen. Tail considerably rounded, the tail-feathers more than two and a half times the length of the tarsus, but shorter than three and a half times the same length, and decidedly shorter than the wing.

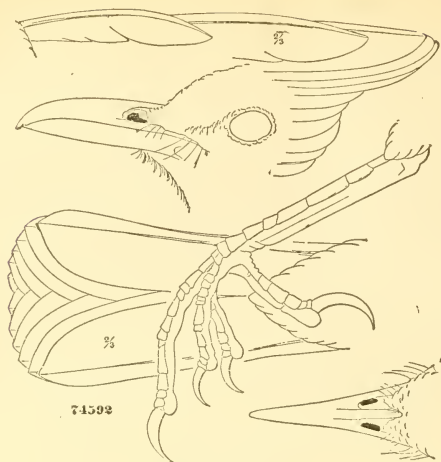
REMARKS.—As to which species should be included within this genus, authors have had different opinions. So has especially Professor Baird included within it the *Turdus aurantius* Gmel., although it seems that he is aware of the incongruity of this species and those which were considered typical by the founder of the genus, Mr. Sclater (see Rev. Amer. Birds, I, p. 4), and I think these birds are too heterogeneous to become members of the same genus. *T. aurantius* will be very difficult to separate from the genus *Merula*. The bird looks rather peculiar, and will probably require a separate genus for itself, although I have not succeeded in finding characters sufficient to separate it from the latter group, with which, for the present, I have been obliged to keep it.

Of the species which I have been able to examine, only the following belong to the genus *Semimerula*, restricted and defined as above: *Semimerula gigas*, *Semimerula xanthosceles*, and *Semimerula atrosericca*.

This genus does not occur anywhere else than in South America.



Cichlherminia herminieri.

*Margarops fuscatus.*

CICHLHERMINIA Bonap.

<1854.—*Cichlherminia* Bonap., Coll. Delattre, p. 26.

=1859.—*Cichlherminia* Selat., Proc. Zool. Soc. Lond., 1859, p. 335.

Size large. Plumage spotted and squamated underneath. Wing rounded, third, fourth, and fifth primaries being equal and longest; second primary about two and a half times the first; secondaries long. Bill very large and stout; culmen arched from the base; commissure with very distinct subterminal notch, only a little more than twice the length of the long gonys. Bristles along gape numerous, and very long and strong; on the *apex malaris* a tuft of numerous stiff bristles. The booted tarsus stout and lengthened, not being, however, more than two times the exposed culmen. Tail very slightly rounded and short, so that the outstretched legs are reaching nearly to the tip of tail; tail-feathers scarcely more than twice the length of the tarsus, and very much shorter than the wing. Below and behind the eye a large naked space.

REMARKS.—As has already been stated, the genus *Cichlherminia*, restricted as above, belongs to the *Turdidae*, whereas the other species, generally admitted to it, form a well-defined genus, *Margarops* Selat., and belong to quite a different family, being characteristic members of the *Miminae*. All those specimens which I have had opportunity of examining have booted tarsi, *Merula*-like bill, and a very characteristic Thrush-like plumage, while in *Margarops* these parts are characteristically *Mimine*. (See fig. of *M. fuscatus* given above.) Unfortunately, however, I have not been able to procure a young specimen, and consequently I cannot tell whether its markings agree with those of the young of the other *Turdidae*, although I have but little doubt that this

will be found to be the case. The relationship to the *Mimina* seems to be a very remote one, and even the external spotted appearance, which appears to have been the chief reason for uniting it with those birds, shows only a slight and very superficial resemblance to the genus *Margarops*.

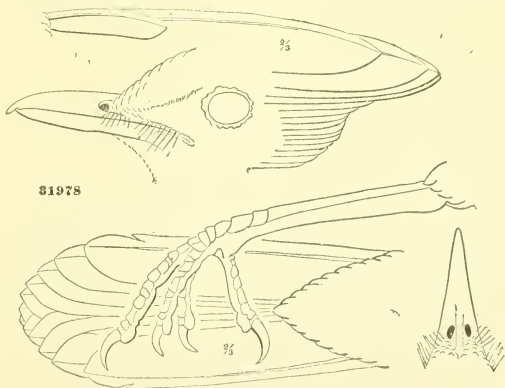
This genus is peculiar to the lesser Antilles.

MIMOCICILA Selat.

- <1850.—*Galeoscoptes* Cab., Mus. Hein., I, p. 82.
- =1859.—*Mimocichla* Selat., Proc. Zool. Soc. Lond., 1859, p. 336.
- =1865.—*Mimokitta* Bryant, Proc. Bost. Soc. IX, p. 371.
- =1866.—*Mimocitta* Newton, Ibis, 1866, p. 121.

Size, moderate; prevalent color, bluish gray; the outer tail-feathers having a large white patch at the tip. Wing somewhat rounded, the third, fourth, fifth, and sixth primaries being longest; the third never longer than the sixth and considerably shorter than the fifth; second primary shorter than the seventh, and never longer than two and three-fourth times the first; secondaries rather long. Bill large and rather slender; the commissure with a more or less distinct notch, only very little larger than two times the gonyx; chin-angle not protruding before the nostrils. Rictal bristles inconspicuous. Tarsus somewhat lengthened, but less than twice the exposed culmen. Tail graduated and long, the outstretched legs falling far short of its tip; the largest tail-feathers about five times the tarsus and about as long as the wing. Below and behind the eye a naked space.

REMARKS.—The few species composing this genus, which is confined to the West Indian Islands, form a well circumscribed group. It shows some relationship towards the *Mimina*, but as neither its position among the *Turdidae* nor its validity as a distinct genus has been disputed, it needs no further remarks at this place.



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Mimocichla rubripes.

Group PLATYCICHLÆ.

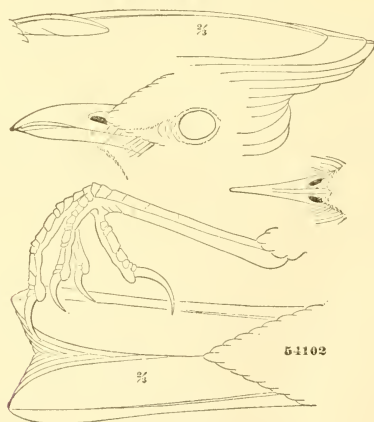
Synopsis of the genera.

- a*¹ Outermost tail-feathers longer than the inner ones; second primary shorter than the seventh. *Cossyphopsis*.
- a*² Outermost tail-feathers shorter than the inner ones; second primary longer than the seventh.
- b*¹ First primary two-sixths to two-sevenths the second; tail slightly rounded. *Platycichla*.
- b*² First primary about two-fifths the second; tail emarginated and rounded. *Turdampelis*.

REMARKS.—This group shows a near relationship towards the *Merula*, with which some of the species of the two first genera always have been treated. The characteristic shortness of the gonys, however, and the statement of Professor Baird of the very close relationship between the genus *Platycichla* and *Turdampelis* (*Cichlopsis*), which I myself have never seen, and between the latter and *Myadestes*,* led me to the conclusion that their proper place will be here within the *Myadestina*, forming an intermediate link between the true Thrushes and the more aberrant looking *Myadestes*.

COSSYPHOPSIS† Stejneger.

Type *Cossyphopsis reevei* (Lawr).



Cossyphopsis reevei.

Size moderate; color uniform; throat marked with black streaks. Wing rounded, the third, fourth, and fifth primaries being longest, the

* See Rev. Amer. Birds, I, p. 417: "The latter genus [*Platycichla*] is so closely related to *Cichlopsis* as almost to be the same," and *op. cit.*, p. 434: "The relationship of this genus [*Cichlopsis*] to *Myadestes* is very close. * * * In fact, the only tangible differences are in the stouter bill, rather more united toes, more compact plumage, and absence of wing-pattern." In these respects the *Cichlopsis* agrees with the *Cossyphopsis* and *Platycichla*, thus forming, as it seems, a very natural group.

† Κόσσυφος=merula, ὄψις=facies.

third not longer than the fifth; second primary three and one-fourth times the first, and shorter than the seventh; secondaries very long, the distance from the tip of the longest of the greater wing-coverts to the tip of the longest secondary twice the distance from the latter point to the tip of the longest primary; bill Thrush-like, attenuated at the end; culmen arched from the base; commissure rather straight, with a distinct subterminal notch, three times the length of the short gonys; chin-angle reaching considerably before the line of the nostrils, the openings of which are large and oval, the overhanging membrane being rather narrow; bristles along gape weak and short; tarsus moderate, longer than middle toe and claw, and considerably longer than one-fourth the longest tail-feather, but shorter than twice the exposed culmen; tail fan-shaped, emarginated, the feathers gradually becoming longer from the middle pair outwards, the outer pair decidedly the longest; the outer web of the outermost tail-feathers broadens conspicuously toward the somewhat acuminate tip; longest tail-feathers less than four times the commissure.

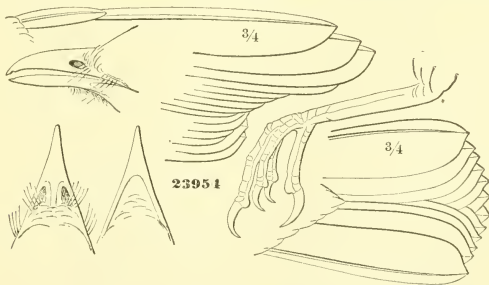
REMARKS.—Of this genus only the type species is as yet known, but this bird is so peculiar as to show its difference from all other Thrushes at once. The shortness of the gonys, and several other features, point towards its position among the *Platycichlae*, but the tail, with its emarginate shape, is, so far as I am aware, unique among those birds which can claim any relationship with it.

PLATYCICHLA Baird.

<1854.—“*Myiocihla* Schiff,” Bonap. Coll. Delattre, p. 30. (Type *Cichlopsis leucogenys*, Cab.)

=1864.—*Platycichla* Baird, Rev. Am. Birds, I, p. 32. (Type *P. brevipes*.)

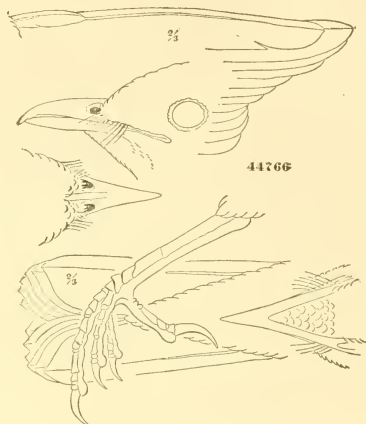
Size moderate; color uniform; wing rounded, the third, fourth, and fifth primaries being longest, the third about equal to the fifth; second



Platycichla “*brevipes*.”

primary not longer than three and a half times the first, and longer than the seventh; secondaries moderate, the distance from the tip of the longest of the greater wing-coverts to the tip of the longest second-

ary only a little longer than the distance from the latter point to the tip of the longest primary; bill much like that of the foregoing genus, the commissure being only a little more arched, and the gonyx still shorter, lower mandible much weaker and narrower; rictal bristles stronger and much longer; tarsus short, rather shorter than middle toe and claw, less than one-fourth the longest tail-feather, and much shorter than twice the exposed culmen; tail rounded, the feathers grad-



Platyichla flavipes.

ually becoming shorter from the middle pair outwards, which is the longest one; the tips of the tail-feathers very acuminate, the outer web not conspicuously broader towards the tip; longest tail-feathers never four times the commissure.

REMARKS.—This genus and its type species have had a somewhat peculiar fate. Although twice mentioned in one of the most admired and admirable works of modern ornithology (Rev. Am. Birds, I, pp. 32 and 436), it has been passed by in silence by all authors, and almost forgotten, until lately Mr. Sharpe (Cat. Birds, Brit. Mus., VI., p. 379) has reprinted the original definition and description. Even in Selater and Salvin's *Nomenclator Avium Neotropicalium* this bird is omitted, and nobody has been able to obtain a second specimen besides the type.

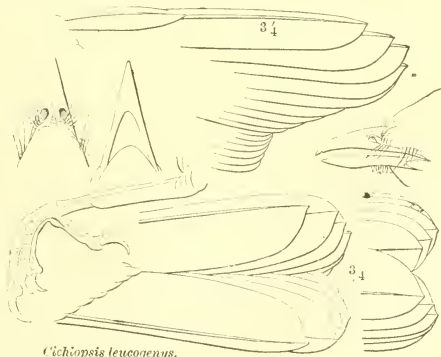
When examining the specimens of "*Turdus*" *flavipes* and *T. carbonarius* I felt soon convinced that they did not belong to the true *Merula*, but that their proper place would be somewhere in the neighborhood of *Myadestes*, and had just decided to make them types of a new genus, the name of which I had already composed, as I was struck by the agreement of their peculiar characters with those of *Platyichla*. I consequently very eagerly compared specimens of the two species men-

tioned above with the type specimen of Professor Baird's *P. brevipes*, and found them, to my great surprise, agree so well that I am convinced that the latter species is only the female of *flavipes*, or of a very nearly allied species. I have no female of *flavipes* at hand for comparison, but the structural features are so nearly the same, and the descriptions of the females of this species agree so well with the color of *brevipes*, that I have no doubt that my identification is right. The only difference which I can detect is the somewhat shorter tarsus of *brevipes*, but this is perhaps only an individual variation, although it possibly may turn out to be a different species.

We would then have the following species within this genus:

1. *Platycichla brevipes* (Baird).
2. *Platycichla flavipes* (Vieill.).
3. *Platycichla carbonaria* (Licht).

As to the generic name, it may be remarked that *flavipes* has been formerly united with its near relative, *Cichlopsis leucogenys*, Cab. within the genus *Myiocihla* "Schiff.", as the type of which it has usually been regarded. But it will seem from the following remark of Bonaparte, the first author by whom the genus *Myiocihla* was published, that the *leucogenys* is the true type. He says (Notes Coll. Delattre, p. 30), "*Turdus flavipes*, Vieill. (*carbonarius* Ill., *ardesiacus* Cuv. nec Auct.!) est pour Schiff une *Myiocihla*; mais y est-il bien placé si le type de ce genre est, comme nous le croyons, sa *Myiocihla ochrata*, du Bresil (*Turdus brunneus*! Freyreiss, nec Anglorum et Bodd.)". In this case the name Professor Baird has given it will stand.



Cichlopsis leucogenys.

TURDAMPELIS LESS.

= 1884.—*Turdampelis* Less., Echo du Monde Sav., 1844, p. 156. (Type *T. lauioides*.)

= 1850.—*Cichlopsis* Cab., Mus. Heim., i, p. 54. (Type *C. leucogenys*.)

< 1854.—"*Myiocihla* Schiff" Bonap. Coll. Delattre, p. 30. (Same type.)

Size moderate; color uniform. "Wing rather longer than tail." "fourth and fifth primaries longest;" "third, between fifth and sixth;" "first

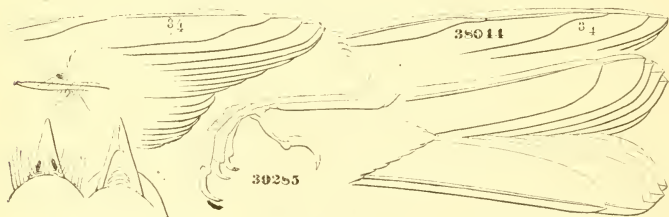
quill about two-fifths the second;" "second intermediate between sixth and seventh;" "wings quite pointed." "Bill rather stout and somewhat Thrush-like;" "the lower mandible is rather deeper and stouter" than in *Platycichla*, "the upper less attenuated, viewed from above;" "gonys about two-fifths the lower edge of lower mandible." "Frontal and rictal bristles well developed. Feet short; tarsus about equal to middle toe." "Tail emarginated and still more rounded." (Baird, Rev. Amer. Birds, i, pp. 433-435.)

REMARKS.—As I have not had the opportunity of examining any specimen, I have nothing to add to Professor Baird's description (*l. c.*), of which I have given extracts above, showing the essential characters in the same manner as are given the marks of the other genera here defined and described.

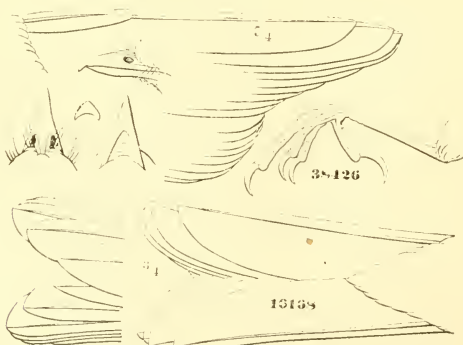
Although it may be admitted that there is some doubt as to the identification of the species of Lesson, belonging to his genus *Turdampelis*, I think that this name is the same as *Cichlopsis* of Cabanis.

The genus is only known to embrace two species, one of which is but lately described, viz: *Turdampelis leucogenys* (Cab.), and *Turdampelis gularis* (Salvin & Godman), *Ibis*, 1882, p. 76.

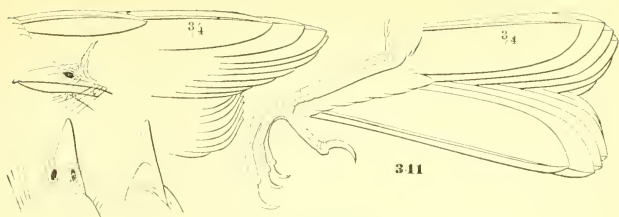
Group MYADESTEAÆ.



Myadestes solitarius.



Myadestes townsendi.



Myadestes elisabethæ.

MYADESTES.* Swains.

- = 1838.—*Myadestes* Swains., Nat. Libr., xiii, p. 132.
- = 1838.—*Myidestes* Swains., op. cit., p. 134.
- = 1842.—*Myiadestes* Agass., Nomencl. Zool. Aves, p. 49.
- = 1846.—*Myiesthes* Agass., Index Univers., p. 241.
- = 1854.—*Myiadectes* Bonap., Not. Coll. Délatre, p. 27.

Size rather small; color unspotted and unstreaked. Wing rounded, the third, fourth, fifth, and usually, also, the sixth primaries longest; second primary never longer than three and a half—usually only two and a half—times the first, and usually shorter than the seventh; secondaries rather long. Bill weak, short, and broad, much depressed; commissure nearly straight, with distinct subterminal notch, and three times as long as the short gonys; chin angle reaching considerably before the line of the nostrils, which are oval, with overhanging membrane. Bristles rather well developed. Tarsus rather short, seldom exceeding in length the middle toe and claw, usually a little shorter, but about twice the exposed culmen, and about one-fourth or less the length of the longest tail-feathers. Tail rounded, or double rounded, the outermost pair of tail-feathers always considerably shorter than the longest; feathers rather narrow, tapering gently from base to tip, the shafts of the outermost converging towards the tip; longest tail-feathers never shorter than four times the commissure. Feathers of occiput full and somewhat lengthened.

REMARKS.—The relationship of this genus has already been pointed out. I will here only remark that I am inclined to believe that the “Flycatching Thrushes,” besides their close affinities to *Turdampelis* and the *Platyicblea*, on the other hand are somewhat related to the *Sialca*. That the group, besides, show some relationship towards certain African forms is not so very surprising, when we remember several other affinities of South American and West Indian birds with forms from Africa. A very striking instance is in this respect the close relationship between members of the genus *Merula*—especially those composing the division *Planesticus*—inhabiting the two continents.

* The recently adopted spelling is *Myiadectes* (see Sharpe, Cat. Birds Brit. Mus., vi, p. 368, where Salvin and Godman are erroneously given as the original authors). This is intended to be an “improvement” or “correction” of Swainson’s original name, being, however, quite unnecessary, as the derivation of *Myadestes* is from *Méa* (att. for *μνία*), a fly, and *Ἐδεστής* (Hdt. 3, 99)=an eater, devourer.