

It is exceedingly interesting as presenting an entirely new form, different in many particulars from any before observed ; so much so, that I am induced to form for it a new family, to be placed near *Anadiadæ* and *Cherviolidæ*, which may be thus characterized :—

1. IPHISADÆ.

Scales of the back, belly, nape and throat smooth, broad, six-sided, transverse, forming a single series on each side of the tail, narrow, lanceolate, elongate, regularly keeled, in rings alternating with each other ; head shielded ; chin shielded ; ear open, circular ; femoral pores distinct.

IPHISA.

Head depressed, shielded ; anterior frontal single, broad, four-sided ; posterior frontals two, small, subtrigonal ; vertebral single, rather elongate ; posterior vertebral two, small, five-sided ; occipital three, larger, middle one narrow, longitudinal ; superciliary shield 3-3, hinder smaller, anterior smallest ; temple with small shields ; labial shields moderate ; rostral and mental broad ; chin entirely shielded ; anterior single, transverse, first pair very large, triangular, covering nearly the whole of the chin, second pair small, at the outer hinder angle of the former ; nostrils lateral, in the lower edge of the nasal shield, between it and the labial shield ; eyes large, lateral ; eyelids scaly ? ; ears circular, open ; nape, back, throat and belly covered with two series of broad, smooth scales ; sides rounded, covered with three or four series of six-sided, smooth scales, placed in oblique series ; chest with a collar of five scales, the central one elongate, triangular, the lateral ones four-sided, the outer pair very narrow ; preanal shields three, the central one elongate, narrow, subtriangular ; limbs short, weak, covered with broad smooth shields above, the hinder shield beneath ; femoral pores 10-10, distinct, the series nearly united in front of the preanal plates ; toes 5-5, unequal, the inner very short, the outer hinder separated from the other by a space like a thumb ; tail elongate, cylindrical, tapering, covered above and below with whorls of narrow, elongate, regular, lanceolate, strongly keeled pointed scales, those of each series alternating with those that succeed and follow it.

1. IPHISA ELEGANS. (Reptilia, Pl. VI. fig. 3.)

Olive-brown black marbled ; sides darker, white varied ; chin and beneath yellowish white.

Hab. Para.

2. DESCRIPTIONS OF SOME NEW BIRDS IN THE MUSEUM OF THE EARL OF DERBY. BY DR. KAUP.

(Aves, Pl. XXXVI. XXXVII. XXXVIII.)

During my visit to London last year I had the honour to receive an invitation from the Earl of Derby, to visit his collection at Knowsley Hall, with permission to use the materials I might find there for

the monography of *Muscicapidæ* on which I was engaged. Of that collection I had already formed very high expectations; but I was agreeably surprised by finding them all surpassed, so great is the richness of this noble collection. It contains more than 14,000 specimens of stuffed birds, besides skins, which are not yet numbered. What adds still greater interest to this collection is, that it contains a large number of the original specimens described by Latham and other English authors, of whose writings these specimens are the only explanation. To the pleasure of working in so rich a collection must be added the command of a colossal library, to which not one work of importance is wanting. All this, with the aviaries of magnificent living birds, from every zone of the world, must have the greatest charm for the naturalist, and make Knowsley Hall for him a perfect Eden, which once seen shall never be forgotten.

The new birds described here include only one portion of my researches, because I could not finish so many genera. The materials of the very rich family of *Muscicapidæ* are too extensive, for a complete elucidation during the limited period of my visit from a foreign country; I wish my descriptions therefore to be considered only as fragments.

The object of my visit to England was to collect materials for a complete monography of the *Muscicapidæ*; but notwithstanding the many favours I received, and the extreme liberality with which my labours were facilitated in every English collection, I must confess with sorrow that I shall never be able to make a complete whole (perfectly free from objection), with materials collected in different museums. A perfect arrangement can only be achieved by the study of the materials present together, so that at every moment a comparison may be made between any two or any number of the species.

Were it my good fortune to assemble the whole materials of one family in my rooms at Darmstadt, one winter only would be necessary to finish each family in such a manner as to satisfy the requirements of modern science.

Were any one museum willing to accord me the whole materials in its possession, it is probable that all the supplementary species not contained in that collection would be readily furnished by other museums, as the absence of a few species for a short period would be of little or no importance.

That we can only climb to the summit of our science by means of well-made monographies, there can be no possible doubt; and I attach a higher value to a monography constructed on philosophical principles, than to the best fauna of any single part of the world: for only by a strict comparison of the birds of the five parts of the globe can we know what is a family, a subfamily, genus, species and subspecies. Only in this way—a difficult way no doubt—can we learn the true harmony of nature; and thus shall we be filled with admiration, when we see that every species, genus, family or order represents a certain type, and must receive its place in a scheme of classification according to fixed laws, which man must discover, but over which he has no control.

This charm can never belong to merely descriptive ornithology, because even the best descriptions are only like mosaic stones, which, when placed without rules, or arranged according to false principles, give us only a scattered mass of heterogeneous materials, or a picture destitute of truth.

These claims I have urged over and over again in my dissertations, but hitherto without effect. When shall the time arrive when a catholic spirit shall guide the destinies of science, and lead onward to that triumph of true knowledge, in which every director of a museum, and every student of the works of nature, may take his part?

At present it is impossible that a naturalist can without help arrange the whole materials of one class in his museum. Our museums are little more than great exhibitions for the people, who look too often only to colour, instead of being stores of nature's treasures, ready to be communicated to every naturalist who has proved himself worthy of the name. Every museum ought to accord freely and liberally the wished-for materials, for this is the cheapest way in which a family can be properly named and accurately classed. The common excuse that the lent materials might come to harm, is little more than an excuse. Time and destructive insects will do the harm, without the slightest advantage to science.

NISUS (seu ACCIPITER) CHIONOGASTER, Kaup.

Diagnosis.—Above dark blue grey, beneath pure white.

Description.—The male is less than the *Nis. fringillarius*. Above dark blue grey, the crown, lorum, and a stripe over the eye- and ear-cover feathers more approaching to black; ear-covering, cheek and crop with fine black quill lines; tail with three black bands and a broader band at the end, which is white bordered; the underside of the tail has the bands more silver-grey; the first tail-feather with five bands before the large end-band; the wings on the inner side with four bands before the large end-band. Before the emarginations the bands are grey, and after them whiter.

The larger female with a white eye-stripe, and broader black quill stripe on the crop; the cover feathers of the tibia with a fine rufous tint.

According to the ticket of M. de Lattre, the iris of the female is orange, and that of the male dark brown, like burnt sienna.

These two specimens were procured by M. de Lattre in Coban, in the year 1843.

Dimensions in millimetres.—

	♂	♀
Head	40	45
Gape	16	19
Wings	173	206
Tail	140	160
Tibia	47	56
Middle toe without nail . .	32	37

We possess several species in the genus *Nisus*, Cuv., seu *Accipiter* of the English authors. Most of these are very near to the common Sparrow-Hawk; and I think some of them, like the North American

fuscus seu *velox*, the African *rufiventris*, the *madagascariensis*, and perhaps the *erythrocnemius* of G. Gray, are not true species, but that they are subspecies of the common European *Nisus fringillarius*, forming a group amongst themselves, and exhibiting by no means the decided differences apparent between *fringillarius* and *pileatus*, or *pileatus* and *tachiro*.

In the same near relation to the *chiquera* of Western Africa do I consider the true *chiquera*, Vaill. 30, from India; and this opinion I found on the following characteristics.

The West African *chiquera* has the body above darker cinereous, with very distinct narrow black lines, and the stripe beneath the eye, and the black stripe over the eye and ear-covers, are more distinct; the rufous head with darker fine stripes.

The Indian *chiquera* has the head without stripes; the body above lighter grey, with very few traces of black bands; and the black semi-circle round the eye is shorter and not so complete.

But these slight differences will not justify us in considering the West African *chiquera* as a true species distinct from the Indian true *chiquera*; it is only a subspecies of the latter true species. As such we must make a distinction, and as such it must be accorded a place in the system. I think the best way is to give a description of the oldest known subspecies, and arrange all the other subspecies with different names, distinguished by the letters of the alphabet, *a*, *b*, *c*, &c., amongst the true species. In this way it would only be necessary to give a very short description of the subspecies, consisting of the few marks by which it differs from the old known subspecies. Until we have discovered all the species contained in one and the same subgenus, we can never say with certainty whether a given specimen represents a true species, or only a subspecies; I must therefore confess that in the following descriptions of the family *Muscicapidae*, it is very probable that I have described as species some specimens which hereafter will be arranged as subspecies, when the whole species composing the subgenus are completely known.

One of the most interesting birds in the collection of Lord Derby is a little Falcon, belonging to the subfamily *Falconinae*, which enabled me to correct the characters of the genus *Harpagus*.

The characters must be changed as follows:—Bill large, with two teeth, slender and indistinct, or strong and distinct; wings short, and in the proportions of the quills very like *Nisus* seu *Accipiter*; toes short, and the inner and outer toes of the same length.

The genus *Harpagus* must be divided into two subgenera.

The older subgenus *Harpagus* must be distinguished by the following characters:—Two strong and distinct teeth; the nostrils placed near the end of a soft membrane covering a large cavity; tibia with scales not divided.

Two species, *diodon* and *bidentatus*.

The other subgenus, in which this new species must be placed, must be characterized:—Two slender indistinct teeth; the nostrils round, very small, and bored in the nasal bones; the first wing-

feathers with very distinct emarginations, the fourth the longest; tibia with whole and divided scales (fig. 3).

I give this subgenus the name of *Spiziapteryx*, and the species I have named

HARPAGUS CIRCUMCINCTUS.

Diag.—Size of the Kestrel, with white stripe over the eye, which encircles the whole head and is connected with a white collar; the tail-covers, above and beneath, white.

Descr.—Rufous ash-grey, beneath lighter, with dark brown shaft-stripes; the white stripe over the eye, and the collar black margined; tibia-covers white; the arm and hand wings white at the roots, and like the stronger cover-feathers, with white spots and bands on the inner and outer webs; the first wing-feather without spots on the exterior web, and with fine white spots on the interior web; tail black-brown; beneath with white roots and three small white bands and an end band; the fifth without spots on the exterior web; the fourth with only traces; the third exhibits round white spots; and the two exterior feathers are white-banded. From this very irregular distribution of spots, the tail, seen from above, exhibits a very irregular drawing. Cere, naked eye region and feet yellow; nails dark brown.

I apprehend that this specimen, the only one in England, is not a very old bird. Lord Derby received this bird from Chili, by Mr. Bridges.

Dimen.—Head, 49; bill, from the cere, 16; from the gape, 22; height, 13; breadth, 20; over wing, 123; tip of the wing, 56; middle tail-feather, 148; outer tail-feather, 115; tarsus, 45; middle-toe, 26; nail, 11; outer-toe, $17\frac{1}{2}$; nail, 10; inner-toe, 16; nail, 12; after-toe, 13; nail, 13.

A new species of the subgenus SAUROPHAGUS, Swains.

In the little subgenus *Saurophagus*, Swains., we had, till now, only three species. These are, *lictor*, *sulphuratus*, and *flavus*. I received by Mr. Wollweber from Zacatecas in Mexico an only specimen of a fourth species; but I found in the collection of Lord Derby, and in the British Museum, a great number of the same species.

To this species I have given the name of *Derbyanus*, as a mark of my respect for that distinguished patron of ornithological science, the Earl of Derby, President of the Zoological Society.

All the species of this little subgenus have the same general colouring, and are distinguished only by very few characters taken from the colouring of the wings and from the dimensions. The young ones have, like the young birds of *Scaphorhynchus*, the bill shorter and bigger, and the head is black, without the beautiful crest of the old birds. The old birds have a white front, connected with a white band over the eyes and over the black ear-covers, and surrounding the black head, which in the middle is ornamented with a yellow crest; the chin and underpart of the neck white; breast, belly,

under-wings and tail-covers yellow; back olive-coloured; wings and tail brown, with red margins.

SAUROPHAGUS LICTOR, Gray & Mitch. Genera of Birds, t. 62.

Lanius lictor, Licht.—*Saurophagus pusillus*, Swains.—*Swainsonii*, Gould.

Diag.—Only the margins of the outer webs of the wings rufous; wings 86 mm. long. It shows the finest bill, a more graduated tail, and the smallest dimensions.

Hab. Brazil, Para.

SAUROPHAGUS SULPHURATUS.

Lanius, Gmel.—*Tyrannus*, Vieill. Enl. 296.

Diag.—Only the margins of the outer webs of the wings rufous; wings 110–114 mm. long.

Hab. Amer. meridional.

SAUROPHAGUS FLAVUS, Gray.

Corvus, Gmel.

Diag.—Only the margins of the outer webs of the wings rufous; wings 126–130 mm. long.

Hab. Brazil meridional. Bolivia.

SAUROPHAGUS DERBIANUS, Kaup. (Aves, Pl. XXXVI.)

Diag.—The wing-feathers from the second to the sixteenth have the whole outer webs on the greatest part of the length rufous; wings 128 mm. long.

Hab. Zacatecas, in Mexico.

Comparison of the dimensions.—

	<i>Saur.</i> <i>lictor.</i>	<i>Saur.</i> <i>sulphuratus.</i>	<i>Saur.</i> <i>flavus.</i>	<i>Saur.</i> <i>Der-</i> <i>bianus.</i>
Head	41 ..	53–58 ..	60–62 ..	60
Bill, from the forehead . .	22 ..	29–30 ..	35 ..	32
— from the gape	26 ..	32–36 ..	40–42 ..	38
Wings	86 ..	110–114 ..	130 ..	128
Tail	74 ..	82–86 ..	100 ..	92
Tarsus	16 ..	25–27 ..	28 ..	29
Middle-toe with the nail . .	— ..	21 ..	30 ..	26

In these dimensions *Saurophagus Derbianus* is very near to *Saur. flavus*.

In what relation with the subgenus *Scaphorhynchus*, Pr. Max., this little subgenus *Saurophagus* is to be placed, I shall determine in my next monography, *Muscicapidæ*.

Of the subgenus *Scaphorhynchus*, Ch. Bonaparte, in his very useful Conspectus, has given five species:—*pitangua*, *flaviceps*, *atriceps*, *audax*, and *chrysocephalus*.

The species *flaviceps* and *atriceps* must go down, because *flaviceps*, Sw., is a female, and *atriceps* a young bird of *pitangua*; *audax* does

not belong to this subgenus, and is to be placed in the neighbourhood of *rufinus*, Spix, and *circumcinctus*, Sw., which have the same bill and similar covering.

We have only two species, *pitangua* and *chrysocephalus*, Tchudi, in the section of *Scaphorhynchus*.

Scaphorhynchus, with its broad bill, shorter and feebler tarsi and toes, represents more the Swallow type, and must be placed in the second rank of his genus.

Before I finish I may allow myself the observation, that, till now, the whole family of *Muscicapidæ* has been in a condition of the greatest confusion, and that the greatest number of genera must go down, or must be considered as subgenera of some larger genera. As an example of the way in which this is to be effected, I give for instance the genus *Psaris*, into which I transplant three genera of the new authors.

Some remarks on the genus PSARIS, Cuv.

The genus *Psaris*, which is synonymous with *Tityra*, Vieill., is a true genus, which cannot be considered as the only type of a subfamily, and which cannot be divided into several genera. It is an indivisible genus, which I have separated into some little subgenera only. I prefer, from well-known reasons, the name *Psaris*.

The characters of this genus are:—Thick, strong, slightly compressed bill, without strong bristle-feathers on the mouth gape; tarsi moderately high, with broad scales on the front; on the sides and behind with small scales. *The old males have the second hand wing-feather abnormally short and of an unusual formation.* The females and young birds have the wings regular.

The species of this large genus are limited to the southern parts of America.

a. Subgenus CHLOROPSARIS.

They have the bill and the feathered lorum of the *Pachyrhamphus*, but the wings are shorter and the tail more graduated. Size of a Sparrow, colouring more variegated and greenish on the back.

1. PSARIS CUVIERI, Swains. Spix, tab. 45. 2.
2. PS. ATRICAPILLUS. *Muscicapa*, Gmel. Enl. C. 871 ♂. 831 ♀.
3. PS. VERSICOLOR. *Vireo*, Hartlaub.

b. Subgenus PACHYRHAMPHUS, G. Gray.

The bill unicolor black, shorter than the head, not compressed on the sides; the bristle-feathers moderately long; the abnormous hand-feather like *Chloropsaris*, with broader inner webs and emarginated only on the tip; tail unicolor, very little graduated. Size of a *Lanius colurio*. The colouring is dark and not so variegated.

We can give by the diagnosis the colouring of the abnormous hand-feather of the males.

4. PS. VALIDUS. *Lanius validus*, Licht.

The second hand wing-feather with a long white spot on the inner web, which reaches to the third part of its length.

5. PS. NIGRESCENS. *Pach. nigrescens*, Cab.

The second hand wing-feather black, with white margin on the exterior web.

6. PS. PECTORALIS. *Pach. pectoralis*, Swains.

The second hand wing-feather black, with white spot near the root, and fine white exterior margin.

7. PS. AGLAIÆ. *Pach. Aglaïæ*, Lafr.

The second hand wing-feather with an oval white spot near the root, and without white exterior margin.

c. Subgenus PSARIS.

The red and black bill on the anterior part more compressed, and like *Cassicus*, with broad root, surrounded by the frontal feathers; lorum and eye region naked; the bristle-feathers over the gape very indistinct; the second hand wing-feather extremely narrow, formed like a sword, without an emargination on the tip. The colouring is silver-grey, like *Lanius excubitor*, with more or less black head, face, wings and tail. Size of *Lanius excubitor*.

8. PS. CAYANUS, Cuv.

The black colour covers the whole head, and extends to the tip of the ear-feathers; the bill two-thirds red-coloured; tail black, on the root only white or silver-grey; the wings 116-122, and the abnormous second hand-feather 40 mm. long.

9. PS. BRASILIENSIS, Swains.

The black of the ear-feathers extends further than the black of the head; the bill one-third red-coloured; the inner webs of the wings white-bordered; the wings 129, and the abnormous second hand-feather 41 mm. long.

This species is probably a subspecies of *cayanus*.

10. PS. SEMIFASCIATUS. *Pach. semifasciatus*, Spix, t. 442.

The black on the head covers only the front to the eye, and descends to the anterior ear-feathers round the eye to the chin; tail black, with a silver-grey or white band under the tail-coverts, and a white band on the tip; the wings 127-134, and the abnormous second hand-feather 46 mm. long; it is on the exterior web black, and on the interior white.

The female with dirty brown head and a greyish brown back, with a tinge of red.

11. PS. MAXIMUS, Kp.

In the collection of Lord Derby I found a young bird of very large

dimensions, which does not belong to any of the preceding species. The bill is reddish on the root; the under parts are lighter than on the young *cayanus*; the stripes are more obsolete, and are reduced on the side as black shaft-stripes; shafts of the tail reddish brown; under tail and interior wing-covers white, without spots.

	<i>Ps. cayanus.</i>	<i>Ps. maximus.</i>
<i>Dimen.</i> —Head	52	56
Gape	35	35
Wing	129	129
Tail	70	73
Height of the bill	11	13
Breadth	12	13½

It would be very interesting to discover the old bird of this species.

d. Subgenus ERATOR.

It unites the size, colouring and formation of the second hand-feather of the true *Psaris* with the bill and feathered lorum and eye region of the other subgenera.

This little subgenus, with its mixed characters, gives the clearest proof that *Psaris*, *Pachyrhamphus* and *Bathmidurus* cannot be considered as true genera.

12. *Ps. INQUISITOR*, Orb. *Lanius inquisitor*, Olf.

Diag.—Tail black.

Descr.—The male with black head and white ear-covers, connected with a white collar, which divides the black head from the silver-grey body; tail black, at the root white, which extends to the margins of the inner webs; end of the tail without white band; the second hand-feather on the inner web white.

The female (*Jardinii*, *erythrogenys*, *Selbyi*, and *Nattereri*, Sw.) with white front and rufous ear-covers.

13. *Ps. FRASERII*, Kaup. (Aves, Pl. XXXVII. XXXVIII.)

Diag.—Tail two-thirds white, with black white-bordered end.

Descr.—The head to the ear-covers black; ear-covers and under the posterior part of the eye white; the second hand wing-feather light ash-grey, with white root.

The dimensions of these two species are nearly the same:—head, 52; gape, 32; height of the bill, 10; breadth, 14–15; wing, 105–113; tail, 63–70.

I give to this very distinct species the name of a very able zoologist, who is going a second time to Western Africa. From this journey we may anticipate the greatest benefit to our science, and we wish Mr. Fraser the best success. For all his kind assistance in the collection of Lord Derby I give him my best thanks.

e. Subgenus BATHMIDURUS, Cab.

They have the bill like *Chloropsaris*, *Pachyrhamphus* and *Elator*, but the tail in most of the species is more graduated. The colouring

of it is black, with white or yellow end spots. Size of a Finch. The predominating colour of the males is black, white and grey.

In this little subgenus we have different type-species, about which the different subspecies arrange themselves. One of these is

Ps. MARGINATUS.

Head-feathers black, on the tip with steel-blue; wings black; shoulder-covers, wing-covers and arm-wings white margined; tail graduated, black with broad white tip.

The female has all the margins and the under parts rufous yellow, the back greenish, and the head darker coloured.

a. Ps. MARGINATUS MINOR.

Lorum and a small line on the front whitish; ear-covers, back part of the neck, lower part of the back light grey; upper part of the back black; all the under parts white with grey tint; the abnormous second hand-feather white, on the exterior web on the root with a black spot, and from this spot till the end; along the shaft on the interior web a small long black stripe.

b. Ps. MARGINATUS MAJOR. *Bathmidurus major*, Cab.

Lorum and a small line on the front whitish; before the eye a black spot of bristle-feathers; the shoulder-covers all white; over-back black; the abnormous second hand-feather longer, white, with a small stripe along the shafts on both sides.

c. Ps. MARGINATUS TRISTIS, Kp.

Without a small white line on the front; lorum and the whole head black; the feathers on this part are more massive on the tip, and have more lustre; the shoulder-covers only on the tip white; the whole neck and upper part of the back black; lower part of the back, ear-covers and all the under parts dark grey, mixed with black; the tail has not so much white on the tip; the under side of the wings with smaller white margins; the second abnormous hand wing-feather on the inner web whitish with grey spots, on the outside black, with a grey margin on two-thirds of the upper part; the emargination on the tip very distinct.

Mus. Derb.

Comparison.—	<i>Ps. marg. minor.</i>		<i>Ps. marg. major.</i>		<i>Ps. marg. tristis.</i>	
			♀	♂		
Head	35	..	38	36	..	37
From the gape to the tip of the bill	18	..	19	19	..	20
Wing	65	..	84	73	..	75
Tail	50	..	64	56	..	62

A new species in the collection of Lord Derby and in the British Museum, forming a second type-species, I have called

Ps. PARINUS, Kaup.

Size of *Parus major*; head-feathers black, with a soft violet lustre, and not imitating the form of scales; lorum, ear-covers and all the

under parts dirty white; the whole back and shoulder-covers grey; the little plumage of the wings black or grey, with whitish margins; hand-wings black, arm-wings dark grey, marginated with whitish yellow; the inner webs of the wings broadly marginated with whitish yellow; tail-feathers grey, along the shafts black and on the margin narrowly bordered with yellowish white; the second enormous hand-feather with broader inner web black, with white margin from the emargination to the end, and with a large long white spot from the root to two-thirds of the feather.

The female rufous with darker head; wings black-brown, with predominating rufous yellow margins; belly and under tail-covers lighter-coloured.

This species comes from Para.

Very near to this species must be placed the *Psaris surinamus* (*Muscicapa*, Gmel.), which is characterized with the following diagnosis:—*Cauda rotundata, apice alba; corpore nigro, subtus albo.*

I have not hitherto seen this species, nor *Ps. niger variegatus* and *melanoleucus*.

Dimensions of *Ps. parinus*:—head, 34; gape, 17; wing, 68; tail, 49.

Genus SETOPHAGA, Swains.

This genus is one of the finest of the whole family of *Muscicapidae*. It is found only in America. Only one species inhabits the northern part, namely the very distinct species, *Set. ruticilla*, with its yellow or red-banded wings and tail. The tail-feathers are pointed.

The greater part inhabit the southern parts. They form various little subgenera, distinguished by their very different colouring. One of these, and I think the most beautiful, is the little section to which the following species belong. They have much yellow on the head and under side; on the over parts dark cinereous.

SETOPHAGA RUFICORONATA, Kp.

Diag.—With red head-spot; the first tail-feather all white.

Descr.—The hind ear-feathers black; front, lorum and eye-region yellow; the first tail-feather all white; the second white, with black spot on the outer web, and black margin on the inner web; under tail-covers black-spotted.

Mus. Derbyanum.

Very near to this species is

SET. RUFICAPILLA, Cab.,

of which Bonaparte gives the diagnosis in the following manner:—*Fusco-plumbea, subtus omnino flava, lateribus fuscis; pileo castaneo, rectricibus extimis apice albis.* Guiana.

SET. LEUCOMPHOMMA, Kp.

Diag.—Lorum, eye-region and chin white.

Descr.—Ear-covers black, the yellow colour reaching only to the after part of the eye; tail and under tail-covers like *ruficoronata*.

Hab. Bogota. *Mus. Derb.*

SET. ORNATA, Boss.

Diag.—The whole head beautiful yellow.

Descr.—The head-feathers longer (10 mm.); the face and chin white; the anterior ear-feathers on the tip black, the hind ear-feathers all white; the first tail-feather all white, the second only on the basal inner web black; under tail-covers black-spotted.

Hab. Andes. Mus. Derb.

SET. FLAVEOLA, Lafr.

Diag.—The hind ear-feathers with black stripes.

Descr.—The face orange; the anterior ear-feathers black, the hind ear-feathers yellow, black-striped; under tail-covers white; the first to the third tail-feather with white shaft and shaft-spot, which is enlarged on the tip.

Hab. Columbia. Mus. Derb.

A third type-species is **VULNERATA, Wagl.**

The species belonging to this type-species have the breast and belly beautiful red.

They are natives of Mexico.

SET. VULNERATA, Wagl.

Above cinereous, with black front, throat and rufous spot on the head; first to third tail-feather with white spots on the tip.

SET. PICTA, Swains. Zool. Ill. t. 3. tricolor, Licht.

Above, throat and sides of the lower parts black; margins of the first hand-wing and the three least arm-wings white, like the cover-feathers of the wings; the first and second tail-feather nearly all white, the third white, with broad black margin on the inner web.

SET. MULTICOLOR, Bonap.

Black; front, small band over the wing-covers, belly and the tips of the tail-feathers white.

A fourth type-species is

SET. VERTICALIS, Lafr.

Cinereous, head rufous; breast and belly yellow; the first tail-feather three-fourths, the second half, and the third only on the tip white.

Hab. Bogota. Mus. Derb.

SET. FLAMMEA, Kp.

Breast and belly orange; the first to the third tail-feathers only on the tips white.

Hab. Guatemala. Mus. Derb.

SET. MELANOCEPHALA, Tchudi, p. 192. t. 12. 1.

A small line of the front, lorum, eye-region, like all the lower parts, yellow; the four exterior tail-feathers white.

Hab. Peru. Mus. Derb.

GENUS TYRANNULA, Swains.

The genus *Tyrannula*, as Prince Ch. Bonaparte has apprehended it, is too large, and the forty species must be divided into some natural genera and different subgenera.

The manner of arranging these species in geographical sections is very simple, but very often the wrongest way, although so very clear that it can be understood by everybody. It is true that some genera are limited to a certain part of the world; but there are also many genera which are composed of species from all parts of the world, or from different zones of the same part of the earth.

A very natural section is formed by the species which Bonaparte called "Ultimi Tyrannorum sive Tyrannularum primæ."

The bill of the length of the head; over the nostrils as high as broad; the back rounded off; the gape bristle-feathers of moderate length; the wings moderately long, reaching to the tail-cover feathers; the tip of the wing short; the first wing-feather as long as the eighth, third and fourth the longest; the long tail of the length of the body; the head unicolor, without yellow crest, but the feathers can be erected; above dirty olive, with darker-coloured head; gorge and over breast ash-grey; the belly yellowish; the margins of the wings and tail rufous.

1. TYR. COOPERI. *Muscicapa*, Nuttall.

With shorter wings than *mexicanus*, but with longer bill, like *crinita*; throat and over breast light grey, not so dark as *crinita*; the black stripe along the inner webs of the tail-feathers is broader, like *stolida*.

Hab. Northern America and Chili. Brit. Mus.

2. TYR. CRINITA. *Muscicapa*, Linn.; *irritabilis*, Vieill.

With longer wings; throat and over breast darker grey; all the wing-feathers, except the first, black-brown with rufous margins.

Hab. North America. In every museum.

3. TYR. GOSSII, Bonap.

With longer wings; the anterior part of the outer webs of the first and second hand-wing whole rufous; the head darker, and the ash-grey dark, like *crinita*.

Hab. Jamaica. Brit. Mus.

4. TYR. MEXICANA, Kaup.

With short wings; all the wing-feathers, except the first, with rufous margins; breast light ash-grey; above lighter.

Mr. Wollweber sent me this species, which I found also in the British Museum.

5. TYR. STOLIDA. *Myobius*, Gosse.

With short wings; the rufous margins on the wing-feathers very fine; the black stripe along the shafts of the inner webs of the tail-

feathers reaching only to the middle of the feathers; the inner webs of the exterior tail-feathers with extinguished bands.

Hab. Jamaica. Brit. Mus.

Comparison of the dimensions.—

	<i>Tyr.</i> <i>Cooperi.</i>	<i>Tyr.</i> <i>crinita.</i>	<i>Tyr.</i> <i>Gossii.</i>	<i>Tyr.</i> <i>mexicana.</i>	<i>Tyr.</i> <i>stolida.</i>
Head	46 ..	45 ..	48 ..	43 ..	43
Bill from the gape	28 ..	28 ..	31 ..	24 ..	24
Wing	94 ..	100–105 ..	104 ..	93 ..	86
Tail	88 ..	89–94 ..	95 ..	86–90 ..	82
Tarsus	22 ..	19 ..	24 ..	22 ..	19

It is possible that all these species are subspecies of one or two type-species. This point, however, can only be determined by future researches.

Genus TODIRHAMPHUS.

I found in the collection of Lord Derby two new species belonging to this genus.

TOD. PECTORALIS.

Green, with a white spot before the eye; throat and chin dark ash-grey; next this with white on the crop; breast light ash-grey; the inner margins of the wing-feathers and the inner wing-covers yellow; outer margins of the wing-feathers and tail olive; belly and sides white.

Head, 28; gape, 14; wing, 45; tail, 42; tarsus, 15 mm. long.

Hab. ? Mexico.

TOD. RUFICEPS.

With red head and dark ash-grey occipital feathers; next this an ash-grey collar; over part of the wings black, with two light yellow bands; wing- and tail-feathers with olive margins, which on the arm-wings are more white; lorum black; ear-covers brownish; chin and throat white, with brownish tint, and divided from the yellow under parts with a black striped band; the tibial feathers black.

Head, 26; gape, 13; wing, 46; tail, 36; tarsus, 17 mm. long.

Hab. ? Mexico.

PHRYNORHAMPHUS, Kaup. *Smithornis*, Ch. Bonap.

The bill very broad, half as high as broad, with sharp culmen; the wings short; the first wing-feather long, nearly as long as the seventh, the second as long as the third and fourth; outer toe at the base connected with the middle toe.

I am strongly inclined to believe that this section does not possess the song-muscles.

PHRYNORHAMPHUS CAPENSIS. *Platyrrhynchus capensis*, A. Sm.

Descr.—Upper mandible black, lower mandible yellow; front and lorum rufous yellow; head black; the bristle-feathers with white

roots; ear-covers ash-grey, with whitish shafts and shaft-spots; back olive-grey, with black spots; the roots of all the feathers on the back pure white; wing-covers with rufous yellow margins, which form two small bands; lower parts white, on the sides tinted with brownish rufous, and with broad black shaft-spots; the middle of the throat, belly and under tail-covers white; tail black-brown, with olive margins.

Head, 40; gape, 22; height of the bill, 7; breadth, 12; wing, 72; tail, 55; tarsus, 18; middle toe, 15 mm. long.

Lord Derby's collection. Brit. Mus.

A communication was received from Dr. G. R. Bonyan, of British Guiana, on the Raptorial Birds of that country, of which the following is an abstract:—

3. NOTES ON THE RAPTORIAL BIRDS OF BRITISH GUIANA.

BY DR. G. R. BONYAN.

There are, I believe, only three species of Vulture in British Guiana. The first is the well-known

KING OF THE VULTURES.

Sarcorhamphus Papa of Dumeril.—*Irubicha*, Azara.—*Vultur Papa*, Linn.—*Le Roi des Vautours*, Cuv.—*Carrion Crow Governor* of negroes.

There is a very good drawing of this bird in Latham's 'General History of Birds.' It is by no means common in Demerara, but young birds are occasionally brought from the upper rivers, particularly the upper parts of the Mahaica and Mahaicony creeks, where they abound, to the town. They are easily tamed and eat any sort of meat, not showing a particular predilection to putrid meat. Although I have seen this bird in its wild state, I have never witnessed it alighting upon a carcase; the common Carrion Crows, it is said, cede place until the king has fed. Mr. Waterton witnessed this singular fact, and I have heard it corroborated by more than one person of veracity. I know nothing of its habits or nidification. The colours about the head and neck are remarkably beautiful and varied, and have a downy bloom as it were, which it is impossible to imitate by painting the preserved specimen.

THE COMMON CARRION CROW. *Cathartes iota*.

If this bird be the same as "*Vultur iota*" of Charles Bonaparte, it is imperfectly described by Cuvier as having only the head naked; whereas it has the head and the neck more than half way down, naked, warty and black; nor is its plumage of a shining black, but dull and inky. The Carrion Crow is seen over the whole surface of the country, either soaring on dry sunny days at an immense height in the air, or swooping down in wide gyrations towards the ground. If a carcase be thrown out on a dam, no Carrion Crow being within the range of vision, after a short time one will be seen in a distant