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A MONOGRAPH

OF

THE ODONTOPHORINÆ,

OR

PARTRIDGES OF AMERICA.

BY

JOHN GOULD, F.R.S.,

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1850.

TO

HIS HIGHNESS

CHARLES LUCIEN BONAPARTE,

PRINCE OF CANINO AND MUSIGNANO,

THIS

MONOGRAPH OF THE ODONTOPHORINÆ,

OR

THE PARTRIDGES OF AMERICA,

Is Dedicated,

AS A SLIGHT TOKEN OF RESPECT

FOR HIS EMINENT AND VARIED TALENTS AS A NATURALIST,

AND AS A TESTIMONY OF

THE HIGH PERSONAL REGARD

ENTERTAINED FOR HIM

AFTER MANY YEARS OF UNINTERRUPTED FRIENDSHIP,

BY

THE AUTHOR.

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PREFACE.

WERE it necessary to assign a reason for the publication of the present Monograph, I might state that it is due to the interest excited in my mind by the sight of several living examples of the beautiful *Callipepla Californica*, brought home and presented to the Zoological Society of London by Captain Beechey in 1830. The graceful actions and elegant deportment of these birds inspired me with a desire to become thoroughly acquainted with the entire group, of which they form a part; this desire was even strengthened by the details furnished to me by the late celebrated traveller and botanist, Mr. David Douglas, respecting species seen by him in California, of the existence of which we had until then no idea.

So little had at that time been recorded respecting this group of birds, that Mr. Bennett remarked, in his "Gardens and Menagerie of the Zoological Society Delineated":—"From some observations lately offered by Mr. Vigors, before the Committee of Science and Correspondence of the Zoological Society, it appears that the number of species of this genus, which until within three years of the present time did not exceed four, or at the utmost five (some of them very imperfectly known), has partly by the researches of Mr. David Douglas, and partly by the additions made in various ways to the Society's collection, been

increased to eleven." Desirous, if possible, of extending our knowledge of an interesting group of birds, with which we were so little acquainted, I have from that period until the present moment been unremitting in my exertions to secure every information attainable respecting them. In the course of my researches I have several times visited most of the public and many of the private collections of Europe, and have besides corresponded with various persons in America: the result is that I have had the pleasure of extending our knowledge of the group from eleven to no less than thirty-five species; doubtless others remain to be discovered, for it is not to be presumed that the vast forests and tracts of barren land of the great Andean and Cordillerean ranges have as yet been so far explored as to have revealed to us every species; but herein I have described or figured all with which I am acquainted.

In the Introduction will be found some additional information obtained since the subsequent pages were printed, and also descriptions of three species which I have not thought it necessary to figure.

I shall at all times be happy to receive further information from any person who may be favourably situated for observation, and who will kindly favour me with the result of his researches.

JOHN GOULD.

October 15, 1850.

INTRODUCTION.

It will, I am sure, be conceded, that next to illustrating the ornithology of a particular country, monographs of families or genera are of the greatest interest, since they tend to increase our knowledge of the science far more than mere descriptions of new species; with this view, therefore, I have from time to time turned my attention to the investigation of some one or other of those groups, respecting which much confusion existed, or which had not received the attention that their interesting nature appeared to demand. In selecting those of the *Ramphastidæ* and *Trogonidæ* for the subjects of my previous monographs, I must fairly admit that I was as much influenced by the singularity of their form, and by the splendour of their plumage, as by the fortunate acquisition of many species entirely unknown to science; the subjects of the present monograph, on the other hand, though not remarkable for brilliancy of colouring, are, independently of their claims to notice in a scientific point of view, well worthy of illustration, from their utility to man, both as articles of food and as objects of sport, a utility prospectively important whenever the vast countries of which they are denizens shall become entirely under the dominion of civilization; nor can we overlook their value as objects for our aviaries, and for naturalization in Europe; many of the species would live in the warmer parts of the Continent, and some of them are sufficiently hardy to brave the severities of our winters, and would doubtless thrive in situations similar to those that are suitable to our own Partridge.

To these preliminary remarks I may add, that this section of the *Gallinaceæ* has received no inconsiderable share of my attention for the last twenty years, during which period I have availed myself of every possible opportunity of becoming acquainted with the subject; and I would here record my sense of the kind assistance rendered to me on all hands, particularly by my late lamented friend Mr. John

Natterer of Vienna, the Prince Massena, the Earl of Derby, the Baron de la Fresnaye, the Zoological Society of London, the Viscomte DuBus, the Directors of the Royal Museums of Berlin, Leyden and Paris, and the Museums of Neufchâtel and the Academy of Sciences of Philadelphia; all of whom have, where necessary, most liberally lent me even unique specimens for illustration, besides which my own collection has been from time to time enriched by the addition of several new and undescribed species.

All the members of this group are strictly American, and by far the greater number of them are natives of that portion of the continent lying between the 30th degree of North latitude and the Equator. Four species are now included in the fauna of North America, and four have been discovered in Brazil; some few extend their range to the larger of the West Indian Islands; the late researches among the Andes, particularly in Peru, Bolivia, and the neighbourhood of Santa Fé de Bogota, have made us acquainted with several others; and it is in the countries contiguous to that vast mountain range that additional species may most probably yet be found.

That the members of this group are of very general interest to ornithologists, is evidenced by the fact that several writers have given a synoptical list of the species with which they were acquainted. Not more than two appear to have been known to Linnæus, by whom they were included in his genus *Tetrao*. Latham, in the eighth volume of his "General History of Birds," published in 1823, enumerates nine species, two of which being synonymous with others, the number is reduced to seven. At the first Scientific Meeting of the Zoological Society of London, held on the 9th of November, 1830, Mr. Vigors stated that nine species were then known, to which he added *Ortyx neoxenus* and *O. affinis*, at the same time expressing his doubts as to whether they might not prove to be females or young males of *Ortyx Sonninii* or *O. cristatus*; and it has since been ascertained that his *O. neoxenus* is the female of *O. cristatus*; but his *O. affinis* will, I believe, prove to be a distinct species. M. Lesson was the next author who gave a list of the species of this group, of which he only enumerates nine; and the last writers who appear to have given a general revision of the subject are Messrs. Jardine and Selby, who in the Synopsis Specierum published in the first and third volumes of their "Illustrations of Ornithology," increase the number to eleven. By most of these authors, some mistakes have been made as to the identity of the species and the synonyms having reference to them; and in more than one instance, the old *Perdix Falklandicus*, a bird belonging to a totally different group, is included in the genus *Ortyx*. Few of my readers will, I apprehend, be prepared to learn that not less than thirty-five species are now known; of these, several have been lately described by myself in the "Proceedings of the Zoological Society," and others by Messrs. Lichtenstein, Lesson and Natterer in various continental publications. Vieillot was the first author who perceived the propriety of separating one of the members of this group from *Tetrao* and *Perdix*; proposing the term *Odontophorus* for the *Tetrao Guianensis* of Gmelin; a fact, with which Mr. Stephens must have been unacquainted when he proposed the term *Ortyx* for the American Partridges collectively, with *O. Virginianus* for the type. These two

generic terms are now generally adopted for two distinct sections of the group; for a third the appellation of *Callipepla* was proposed by Wagler, and *Lophortyx* by Bonaparte; the former term, having the priority, is the one retained. Considerable diversity of opinion exists with regard to the propriety of giving names to these subdivisions of families, but this is a point upon which I need not here enter: that such divisions do really exist, will, I think, be apparent to all who will carefully examine this or any other large group of birds; and my own observations lead me to believe, that wherever structural differences, however slight, are found to exist, a difference will also be found in habits and economy; and that the members of each of these sections will possess a character of plumage common to themselves, but not to the whole group. With certainly the most entire series of this tribe of birds that has ever been brought together, from which to draw my deductions, I may state, that the genera or subgenera must not be confined to three or four, but must extend to six or seven; for the first of which I propose to retain Mr. Stephens's name of

ORTYX,

WITH THE FOLLOWING CHARACTERS:—

Rostrum breve et robustum; culmine gradatìm a basi descendente, tomiis acutis; mandibulâ inferiore rectâ, et apicem versùs denticulis duobus vel pluribus instructâ; *naribus* magnis, et operculo obtectis; *orbitis* vel plumosis, vel aliquanto denudatis; verticis plumis paulo elongatis; *alæ* concavæ, mediocritèr elongatæ, primariis rigidis; quartâ, quintâ et sextâ longioribus; *cauda* brevis, et e plumis duodecim integris confecta; *tarsi,* cum digitis et unguibus, modicè elongati, digitis anticis membranâ basali conjunctis, digito interno cæteris breviore.

Bill short and stout; culmen gradually descending from the base; tomia sharp; lower mandible straight, and armed near the tip with two or three dentations; *nostrils* large, and covered with an operculum; *orbits* either plumed or very slightly denuded; feathers of the crown slightly elongated; *wings* concave and moderately long; primaries rigid, the fourth, fifth and sixth the longest; *tail* short, and composed of twelve well-developed feathers; *tarsi* spurless, and with the toes and nails moderately long; anterior toes united at the base by a membrane, the inner toe the shortest.

The section is strictly a northern one; one species inhabiting the United States and extending its range to Mexico and Jamaica, another Cuba and probably Mexico, and the three others are, I believe, confined to Mexico.

Most of the members of this group are about the size of the European Quail. They go in coveys,

and upon being disturbed fly off to the forest and take shelter among the trees, upon which they readily perch and walk along the branches with ease.

Of those species with which we are best acquainted, the females are found to differ from the males in being of a more diminutive size, and in having the markings of the head and throat less strongly contrasted; for instance, the throat of the female of *O. Virginianus* is brown, while that of the male is white. The species are—

1. Ortyx Virginianus . . . . . Pl. I.
2. —— Cubanensis . . . . . Pl. II.
3. —— castaneus . . . . . Pl. III.
4. —— nigrogularis . . . . . Pl. IV.

The *O. nigrogularis* is distinguished from every other by the strongly-defined crescentic markings of the under surface; it is so rare in the continental collections, that the Museum at Brussels is the only one in which I have observed it. I am indebted to the Earl of Derby and the Viscomte DuBus for the loan of the specimens from which my figures and descriptions were taken.

5. Ortyx pectoralis . . . . . Pl. V.
6. —— Coyolcos . . . . . Pl. VI.

The second section comprises two species, which, from the great size of their nails, I propose to form into a distinct genus under the title of

CYRTONYX,

WITH THE FOLLOWING CHARACTERS:—

Rostrum breve, et robustum, culmine arcuato, et a basi deorsùm curvato, tomiis acutis; mandibulâ inferiore rectâ, cum denticulis duobus lævibus apicem versus; *naribus* magnis, membranâ obtectis et circumdatis; *caput*, cristâ occipitali plumosâ, et retrorsâ, decoratum; *orbitis* plumis indutis; *alæ* paulo elongatæ, tertiariis superimpendentibus, et quàm remiges primariæ longioribus; *cauda* brevis, vix a tectricibus distincta, mollis, laxa; *tarsi* reticulati, modicè longi, et robusti; digitis brevibus, præsertìm digito interiore; halluce debili, et altè posito; *unguibus* magnis, elongatis, curvatis, ad apicem crassis.

Bill short and robust; culmen arched and gradually curving downwards from the base; tomia sharp; lower mandible straight, with two slight dentations near the tip; *nostrils* large, covered and bordered with a membrane;

head crested, the feathers inclining backward and forming a thick tuft on the occiput; *orbits* plumed; *wings* somewhat lengthened in form; tertiaries pendent, overhanging and exceeding the primaries in length; *tail* short, blended with the upper tail-coverts, and composed of soft yielding feathers; *tarsi* spurless, reticulated, moderately long and robust; toes short; the inner of the anterior ones very short; hind-toe feeble, and situated high upon the tarsus; *nails* very large, much lengthened, curved, and thick at the point.

Of this form only two species are at present known, both of which are natives of Mexico; they are rather small in size, being but a little larger than the European Quail, and are particularly distinguished by the singularity of the facial markings, by the shortness of the toes and the great development of the nails. The sexes also appear to differ very much in their colouring.

The species are—

7. Cyrtonyx Massena . . . . . Pl. VII.
8. ——— ocellatus . . . . . Pl. VIII.

The contour of these birds is rendered remarkably round by the shortness of their tails and the fullness of their plumage.

For the third section I propose the name of

EUPSYCHORTYX,

WITH THE FOLLOWING CHARACTERS:—

Rostrum breve, et gracilius quàm in *Ortyge*; culmine gradatìm a basi descendente, tomiis mandibulæ inferioris denticulis duobus parvulis, apicem versus instructis; *naribus* modicè magnis et operculo obtectis; *orbitis* plumis indutis; *caput* cristâ gracili elongatâ, decoratum; *alæ* concavæ, et rotundatæ, remige primariâ quartâ cæteris longiore; *cauda* brevis, et e plumis duodecim flexilibus confecta; *tarsi* cum digitis et unguibus modicè longi; digitis anticis membranâ basali conjunctis.

Bill short and more slender than in *Ortyx*; culmen gradually descending from the base; tomia of the under mandible with two very slight dentations near the tip; *nostrils* basal, moderately large and covered with an operculum; *orbits* plumed; *head* decorated with a thin elongated crest; *wings* concave and rounded; the fourth primary the longest; *tail* short, and composed of twelve flexible feathers; *tarsi* spurless, and with the toes and nails moderately long; anterior toes united at the base by a membrane.

Nearly all the known species of this genus are about the same size as the members of the genus *Ortyx*: they are all adorned with an elongated crest, which in most of them when erect has a forward curvature, and gives the bird a very elegant and sprightly appearance. The tail-feathers and the upper surface generally are more minutely freckled or moth-like in their markings than those of the members of any of the preceding groups; they are also distinguished by the more well-defined spotted markings of the flanks. The plumage of the sexes differs considerably; for, although the female is decorated with a similar style of colouring, the markings are much less decided and brilliant than in the male. The range of the members of this genus extends from Mexico to Brazil. Some of the species inhabit the temperate regions of both the Mexican and Columbian Andes.

The species are:—

9. Eupsychortyx cristatus . . . . . Pl. IX.
10. ———— leucotis . . . . . Pl. X.
11. ———— Sonninii . . . . . Pl. XI.
12. ———— affinis.

Eups. cristæ plumis elongatis, et fuscescenti-cervinis; gulâ ferrugineâ, apud mentum nigro indistinctè notatâ; pectore pallidè vinaceo-cinereo.

Crest feathers lengthened and of a brownish buff; throat rust-red, with some indistinct black marks on the chin; chest pale vinaceous grey.

Ortyx affinis, Vigors, in Proc. of Comm. Sci. and Corr. of Zool. Soc. Part I. p. 3.

From the time Mr. Vigors characterized this bird as distinct, until the present moment, I have always had some doubt of its specific value; yet I must admit that upon every occasion that I have compared it with its near ally *E. Sonninii*, I could not but perceive that it exhibits sufficient differences to warrant its separation: future research alone can decide whether the two birds be identical or not. It is smaller than *E. Sonninii* in all its admeasurements, particularly in the shortness of its tail, is much lighter in colour, and possesses some black marks on the throat, of which I have never observed even a trace in any specimen of *E. Sonninii* that I have examined.

Habitat. Said to be Mexico.

The original of Mr. Vigors's description is in the Collection of the Zoological Society; I possess another precisely the same in size and plumage, which was obtained in Paris; both of these, judging from their plumage, are adult males. I have not considered it necessary to figure this species.

13. Eupsychortyx parvicristatus . . . . . Pl. XII.
14. ———— leucopogon . . . . . Pl. XIII.

For the fourth section I propose the generic term

PHILORTYX,

WITH THE FOLLOWING CHARACTERS:—

Habitus idem ut in genere "*Ortyx*" dicto. *Indumentum plumatile*, molle et laxum, dorsi superioris plumis, nec non scapularum, pectoris et laterum latis et truncatis; illis et pectoris et laterum transversìm distinctè nigro alboque fasciatis, at non guttatis.

General form that of *Ortyx*; *plumage* soft and yielding; feathers of the mantle, scapularies, chest and flanks broad and truncate; those of the two latter distinctly barred across with black and white, and not spotted.

The only known species is

15. Philortyx fasciatus . . . . . Pl. XIV.

Ortyx Perrotiana, O. Des Murs, Rev. Zool. 1845, p. 207.

I have had no opportunity of examining the bird described by M. O. Des Murs, under the above appellation; but, judging from the description, I believe it to be identical with this species.

The *Philortyx fasciatus* is confined to Mexico, and I believe the sexes are similar in their markings.

For the fifth section I retain Wagler's name of

CALLIPEPLA,

WITH THE FOLLOWING CHARACTERS:—

Caput cristâ longâ et pendente ornatum; *rostrum* breve, et aliquantò attenuatum, culmine gradatìm a basi descendente, tomiis acutis, paulò incurvatis; mandibulâ inferiore rectâ, et apicem versus denticulis duobus vel pluribus instructâ; *naribus* basalibus aliquantò grandibus, et operculo obtectis; *orbitis* plumis indutis; *alæ* paulò elongatæ et concavæ, primariis valdè rigidis, remigibus quartâ, quintâ et sextâ cæteris longioribus; *cauda* aliquantò elongata et e plumis duodecim rigidis constans; *tarsi, sic et digiti*, paulo graciles; his ad basin membranâ conjunctis, digito interno breviore.

Head ornamented with a long pendent crest; *bill* short and somewhat slender; culmen gradually descending from the base; tomia sharp, slightly incurved; under mandible straight, and armed near the tip with two or more

fine dentations; *nostrils* basal, rather large, and covered with an operculum; *orbits* plumed; *wings* rather lengthened and concave; primaries very rigid, the fourth, fifth and sixth the longest; *tail* rather long, and composed of twelve rigid feathers; *tarsi* spurless, and as well as toes rather slender, the latter united at the base by a membrane; the inner toe the shortest.

Of this section six species are now known, and they are by far the most elegant members of the whole family: all of them exhibit a pleasingly contrasted style of plumage, and are ornamented with a graceful crest differing in character in every species; forming in *C. picta* an attenuated plume which reaches to the back; rising upwards and falling forwards over the bill in *C. Californica*, and concave and tufted in *C. squamata*: in the first-mentioned species, the ornament would seem to be carried to its maximum. All the species yet discovered inhabit Mexico; the range of one or two of them extends to the western parts of North America, and of most of them to California. They are characterized by a uniformity of tint on the upper surface which is generally olive. In size they are larger than the members of the genus *Eupsychortyx*; still the largest species is smaller than the Common Partridge of Europe.

The sexes differ considerably in colour, the females being unadorned with any bright markings, and having a less developed crest.

The following valuable notes respecting the members of this genus have been kindly transmitted to me by Dr. Gambel of Philadelphia:—

"Each species appears to inhabit quite a different region, however numerous they may be in their respective localities. Along the whole coast of Upper California, most of which I have traversed, I never met with any other than *C. Californica*, of which species I there met immense flocks;—I think I have seen as many as a thousand or more rise at once into the trees upon a sudden alarm. They form their nests on the ground under a bush or tree, and sometimes lay a great number of eggs."

The species are:—

16. Callipepla picta . . . . . Pl. XV.

"The *C. picta*," says Dr. Gambel, "inhabits the mountains of the northern portions of Upper California bordering on Oregon."

17. Callipepla Californica . . . . . Pl. XVI.

Callipepla Californica, Gamb. in Journ. Acad. Nat. Sci. Phil., vol. i. p. 218.

"This beautiful bird," says Dr. Gambel, "is extremely abundant throughout California; in the winter season congregating in large flocks, sometimes of as many as a thousand or more, in those places where there

are woods enough to afford covert for so many. They also resort to the bushy plains and ravines of the hills. Displaying all the watchfulness of the Virginian Quail, they are even more swift of foot, eluding pursuit by running and hiding with surprising speed; but upon sudden alarm are more apt to fly into the trees, where they lie close upon the horizontal branches like so many squirrels, which, added to their colour, resembling somewhat the bark, renders them difficult to be seen. They are exceedingly graceful in their deportment, and when running have the crest elevated and thrown backwards; but when at rest, walking on the ground or over piles of brush, carry it curved forward overhanging the front.

"The nest is formed upon the ground at the foot of a tree, or under cover of a bush. The number of eggs is sometimes very great, as in the instance of one which I found at Monterey, July 20th. It was a shallow hole scratched in the ground at the foot of an oak-tree, with a few blades of dried grass around the sides, but bare at the bottom, and contained twenty-four eggs! I judged from the appearance of them, that two birds had laid in the same nest, as fifteen of them were of a different shade from the others."

18. Callipepla Gambelii . . . . . Pl. XVII.
19. ——— elegans . . . . . Pl. XVIII.
20. ——— Douglasii . . . . . .

Call. Cristâ nigrescenti fuscâ, recurvatâ, spatuliformi.

Crest blackish brown, inclined backwards, and of a spatulate form.

Ortyx Douglasii, Vig. in Zool. Journ. vol. iv. p. 354.—Doug. in Linn. Trans. vol. xvi. p. 145.—Jard. and Selb. Ill. Orn. vol. iii. pl. 107.—Vig. in Zool. of Beechey's Voy. p. 27. pl. 11.—Less. Ill. de Zool. texte de pl. 52, and Birds of Am. vol. iv. pl. 418, young.

Lophortyx Douglasi, Bonap. List of Birds of Eur. and Am. p. 43.

The original and only specimen of this species known, is in the Collection of the Zoological Society of London, to which it was presented by Captain Beechey. It appears to me to be an immature bird, and I was for a long time doubtful whether it might not prove to be a female or young of *Callipepla elegans*; the uniform blackish brown colouring of the crest, which in my opinion would not be found to characterize that of *C. elegans* at any age, has, however, determined me in retaining it as distinct. If my supposition of the specimen in question being immature be correct, the adult male will doubtless be a bird of considerable beauty, although, from the temperature of the latitudes it is said to inhabit, it is not likely that it will be so brilliant in plumage as the more southern species.

Habitat. Western coasts of America.

Dr. Gambel states that *C. Douglasii* and *C. elegans* are opposite sexes of the same species, the female being characterized as the former, and the male as the latter; and adds, that in the Collection of the Academy of Sciences of Philadelphia, there are two specimens procured by himself, which he says are certainly male and female of the same species, and of these the male agrees with *C. elegans*, and the female with *C. Douglasii*: notwithstanding, I am still inclined to the opinion stated above, until additional evidence of my being in error has been received.

21. Callipepla squamata . . . . . Pl. XIX.

For the sixth division I propose the name of

DENDRORTYX,

WITH THE FOLLOWING CHARACTERS:—

Rostrum brevius et lateralitèr minùs compressum quàm in *Odontophoro*, fortius, ita, et apud apicem minus aduncum; mandibulâ inferiore latâ, rectâ, et utrinque denticulis duobus distinctis instructâ; tomiis acutis, non introrsùm curvatis; *naribus* aliquanto magnis, membranâ obtectis, et marginatis; *caput* cristatum; *orbitis* vix plumis denudatis; *alæ* breves, concavæ, primariis minùs rigidis quàm in *Odontophoro*, quintâ et sextâ longioribus; *cauda* lata, rotundata, mediocris, et e plumis duodecim rigidis confecta; *tarsi* reticulati, minùs robusti quàm in *Odontophoro*; digitis modicis, membranâ basali conjunctis; digito interiore cæteris breviore; halluce debili; unguibus paulò longis, levitèr curvatis; margine interno dilatato, et acuto.

Bill shorter, and not so much compressed on the sides as in *Odontophorus*, thicker and less hooked at the point; under mandible broad, straight, and armed with two distinct dentations on each side; tomia sharp, but not curving inwards; *nostrils* rather large, covered and bordered with a membrane; *head* crested; *orbits* but slightly denuded of feathers; wings short and concave; primaries less rigid than in *Odontophorus*, the fifth and sixth the longest; *tail* broad, rounded at the end, proportionate to the size of the bird, and composed of twelve stiff feathers; *tarsi* spurless, reticulated, much less powerful than in *Odontophorus*; toes moderately long, united at the base by a membrane, the inner of the anterior toes the shortest; posterior toe feeble; nails rather long and slightly curved, the inner edge dilated and sharp.

Of this form there are at present three species known; they are the largest members of the whole group, being almost equal in size to a Ptarmigan or Red Grouse. Judging from the more slender structure of their tarsi and feet, I believe them to be arboreal in their habits, and the delicate but bright colouring of their bill and legs seems to me to indicate that they affect situations very different from those resorted to by the members of the genus *Odontophorus*.

The members of the present section, in fact, differ so much in their general contour from all the other members of the family, as to present the idea of their leading off to some other group of the *Gallinaceæ*, apparently to the Guans and Curassows.

The species are :—

22. Dendrortyx macrourus . . . . . Pl. XX.
23. ———— leucophrys . . . . . Pl. XXI.
24. ———— barbatus . . . . . Pl. XXII.

The sexes are alike in plumage, and merely differ in the somewhat smaller size of the females.

For the seventh section I retain M. Vieillot's name of

ODONTOPHORUS,

WITH THE FOLLOWING CHARACTERS :—

Rostrum forte, lateralitèr compressum, culmine valdè arcuato, et ad apicem deorsùm curvato : mandibulâ inferiore rectâ, distinctè bidentatâ utrinque apicem versùs, tomiis incurvatis et peracutis ; *nares* grandes, membranâ obtectæ et circumdatæ ; *caput* cristatum ; *orbitis* nudis ; *alæ* concavæ, primariis rigidis, primâ brevissimâ, quintâ et sextâ cæteris præstantibus ; *cauda* admodùm brevis, concava, rotundata, et e plumis duodecim mollibus et laxis confecta ; *tarsi* elongati, robusti, et fortiter reticulati ; digitis anterioribus, membranâ ad basim conjunctis ; omnibus elongatis, præsertìm intermedio ; digito posteriore brevi, et debili ; unguibus elongatis, ferè rectis, et acutis.

Bill robust, compressed laterally, and with the culmen very much arched and bent downward at the point ; under mandible straight, and with two distinct dentations on each side near the point ; tomia curved inwards and very sharp ; *nostrils* large, covered and bordered with a membrane ; *head* crested ; *orbits* naked ; *wings* very concave ; primaries rigid, the first the shortest, and the fifth and sixth the longest ; *tail* very short, concave, rounded at the end, and composed of twelve soft and unresisting feathers ; *tarsi* lengthened, robust, strongly reticulated and spurless ; anterior toes united at the base by a membrane, and very long, particularly the middle one ; the inner one the shortest ; posterior toe short and feeble ; nails lengthened, nearly straight, and sharp at the point.

Of this particular form, eleven species are now known, all of which, with the exception of *O. strophium*, *O. speciosus*, and *O. Columbianus*, have, in addition to the characters given above, the outer webs of the

primaries banded with buff. The sexes are alike in plumage. Most of the members are about the size of the European Partridge. They affect the forests rather than the more open parts of the country: except when accompanied by their brood, are usually met with singly or in pairs, and when flushed generally take to the branches of trees instead of again descending to the ground.

The species are:—

25. Odontophorus Guianensis . . . . . Pl. XXIII.
26. ———— marmoratus.

Od. corpore subtùs olivaceo-fusco et nigro variegato, his coloribus fascias apud pectus et abdomen efficientibus; crisso, et femoribus fuliginoso-nigris.

Under surface mottled olive, brown and black, assuming the form of bars on the breast and abdomen; under tail-coverts and thighs sooty black.

Ortyx (Odontophorus) marmoratus, Gould in Proc. of Zool. Soc., Part XI. p. 107.

I have not considered it necessary to figure this species, inasmuch as it only differs from *O. Guianensis* in having a smaller bill, in having the orbits more extensively denuded of feathers, a more lengthened and darker crest, and the whole of the under surface dark brown crossed by narrow bands of buff and black: the under tail-coverts and thighs also are sooty black.

This is one of the species referred to as having been discovered in the neighbourhood of Santa Fé de Bogota. The only specimens I have seen, are, one in my own collection, one in that of the Jardin des Plantes at Paris, and one in the Museum of the Earl of Derby.

27. Odontophorus pachyrhynchus . . . . . Pl. XXIV.
28. ———— speciosus . . . . . Pl. XXV.
29. ———— dentatus . . . . . Pl. XXVI.
30. ———— stellatus . . . . . Pl. XXVII.
31. ———— guttatus . . . . . Pl. XXVIII.
32. ———— Balliviani . . . . . Pl. XXIX.

This remarkable bird, which may certainly be regarded as the finest species of the restricted genus *Odontophorus*, is rendered conspicuous by its light chestnut crest, and by the stellations of white ornamenting the chestnut-brown colouring of the under surface.

33. Odontophorus Columbianus . . . . . Pl. XXX.
34. ———— strophium . . . . . Pl. XXXI.
35. ———— lineolatus . . . . . Pl. XXXII.

I have now enumerated every species of this group with which I am at present acquainted; all of which having been carefully compared and examined, I am fully satisfied that they are each specifically distinct, the whole forming a large and well-defined family, distinguishable from the Partridges and Quails of the Old World, with which they have been usually associated, by the absence of any spur or spur-like appendage on the tarsi, and by the possession of tooth-like processes on the under mandible. They are pugnacious in disposition, semi-arboreal in their habits, deposit their eggs in a depression of the ground, or in a very inartificial nest, and the eggs of all the species, so far as I have been able to learn, are white; their food consists of seeds, berries, fruits, and the tender leaves of grasses and other annuals; their flesh is white, tender, and well-flavoured.

LIST OF PLATES.

Ortyx Virginianus.

—— Cubanensis, *Gould.*

—— castaneus, *Gould.*

—— nigrogularis, *Gould.*

—— pectoralis, *Gould.*

—— Coyolcos.

Cyrtonyx Massena.

———— ocellatus, *Gould.*

Eupsychortyx cristatus.

———————— leucotis, *Gould.*

———————— Sonninii.

———————— parvirostris, *Goula.*

———————— leucopogon.

Philortyx fasciatus, *Gould.*

Callipepla picta.

———— Californica.

———— Gambelii.

———— elegans.

———— squamata.

Dendrortyx macrourus.

———— leucophrys, *Gould.*

———— barbatus.

Odontophorus Guianensis.

———————— pachyrhynchus, *Tschudi*

———————— speciosus, *Tschudi.*

———————— dentatus.

———————— stellatus, *Gould.*

———————— guttatus, *Gould.*

———————— Balliviani, *Gould.*

———————— Columbianus, *Gould.*

———————— strophium, *Gould.*

———————— lineolatus.





ORTYX VIRGINIANUS.

Virginian Partridge.

Specific Character.

O. pectore et lateribus pallidè castaneis, abdomine medio fulvescenti-albo, notis nigris crebris et sagittiformibus ornato.

Male.—Forehead, line over the eye and chin pure white, bounded by a band of black, which descends and spreads broadly over the throat; crown of the head, neck and upper part of the breast reddish brown; sides of the neck spotted with white and black on a reddish brown ground; back, scapularies and lesser wing-coverts reddish brown, intermingled with ash and freckled with black; tertiaries edged with buff; wings dusky; lower part of the breast and belly pale yellowish white, crossed with numerous arrowhead-shaped marks of black; tail ash-colour, freckled with reddish brown; bill black; irides dark hazel; legs very pale ash.

Female.—Similar in colour but less brilliant, and with the forehead, line over the eye and chin yellowish brown instead of white.

Total length, 9 inches; *bill*, $\frac{1}{2}$; *wing*, $4\frac{1}{2}$; *tail*, 3; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{2}$.

Tetrao Virginianus, Linn. Syst., vol. i. p. 277.—Gmel. Syst., vol. i. p. 761.—Klein, Av., p. 115.
Perdix Americana, Briss. Orn., tom. i. p. 230.—Ib. 8vo, tom. i. p. 64.
——— *Virginianus*, Lath. Ind. Orn., vol. ii. p. 650.—Wils. Am. Orn., vol. vi. p. 21. pl. xlvii. fig. 2.—Bonap. Syn., p. 124.—Jard. Edit. Wils. Am. Orn., vol. ii. p. 223. pl. xlvii. fig. 2.
Coturnix Ludoviciana, Briss. Orn., tom. i. p. 258. pl. xxii. fig. 2.
Attagen Americanus, Frisch. Vog., tab. 113.
Coturnix Mexicana, Lath. Ind. Orn., vol. ii. p. 653.
Perdix borealis, Temm. Pig. et Gall., pp. 436 and 735.—Vieill. Gal. des Ois., tom. ii. p. 44. pl. 214.
Tetrao Marilandus, Linn. Syst., vol. i. p. 277.—Gmel. Syst., vol. i. p. 761.
Perdix Marilanda, Lath. Ind. Orn., vol. ii. p. 651.
La Perdrix d'Amérique, Buff. Ois., tom. ii. p. 399.
Virginian Partridge, Catesb. Car., vol. iii. tab. 12.—Lath. Syn., vol. iv. p. 777.
Perdix Novæ-Angliæ, Briss. Orn., tom. i. p. 229.—Ib. 8vo, tom. i. p. 64.—Klein, Av., p. 115.
Perdrix de la Nouvelle Angleterre, Buff. Ois., tom. ii. p. 447.
New England Partridge, Albin, vol. i. t. 28.
Maryland Partridge, Penn. Arct. Zool., vol. ii. p. 318. no. 185.—Lath. Syn., vol. iv. p. 778.—Ib. Gen. Hist., vol. viii. p. 324.
Tetrao Mexicanus, Linn. Syst., vol. i. p. 277.—Gmel. Syst., vol. i. p. 762.
Le Colenicui, Buff. Pl. Enl., 149.—Ib. Ois., tom. ii. p. 487.
Louisiana Quail, Lath. Gen. Syn., vol. iv. p. 785.—Ib. Gen. Hist., vol. viii. p. 326.
Ortyx borealis, Steph. Cont. of Shaw's Gen. Zool., vol. xi. p. 377.—Jard. and Selb. Ill. Orn., vol. i. Gen. *Ortyx*.
Coturnix Virginiana, Bonnat. et Vieill. Ency. Méth. Orn., Part I. p. 219.
——— *Marilandica*, Ib., p. 220.
——— *Mexicana*, Ib., p. 223.
Perdix (*Ortyx*) *Virginianus*, Bonap. Syn., p. 124.

Virginian Partridge, Aud. Birds of Am., vol. i. pl. lxxvi.—Ib. Orn. Bio., vol. i. p. 388.
Ortyx Mexicana, Less. Traité d'Orn., p. 507.
Common American Partridge, Aud. Birds of Am., 8vo, vol. v. p. 59.
American Partridge or *Quail*, Nutt. Man., vol. i. p. 647.
Ortyx Virginiana, G. R. Gray, List of Gen. of Birds, 2nd Edit., p. 80.

The range of this well-known species extends from the northern parts of Canada and Nova Scotia throughout the whole of the United States to Mexico. I have also seen specimens from Jamaica and some other of the larger West Indian islands, into which, however, Pennant states that it has been introduced; and various attempts to naturalize it in this country have also been made; but for the want of sufficient protection, and a larger number of birds being turned out at a time, they cannot, as yet, be said to have been successful: were these experiments, however, persevered in, there is no doubt that they would ultimately be crowned with success. Mr. Vigors stated at the first scientific meeting of the Zoological Society held in November 1830, that it had bred, and even become naturalized, in Suffolk; but I am not aware whether the bird is still to be found there, or whether, for the want of proper protection, it has become extirpated.

"This species," says Mr. Audubon, in his 'Birds of America,' "performs occasional migrations from north-west to south-east usually at the beginning of October. For a few weeks, at this season, the north-western shores of the Ohio are covered with flocks, which ramble through the woods along the margin of the stream, and generally fly across towards evening: the flight is rapid, and generally performed at a short distance from the ground. When chased by dogs, or started by any other enemy, it flies to the middle branches of trees of ordinary size, along which it runs with ease, and where it remains until danger is over. The usual cry is a clear whistle composed of three notes; the first and last nearly equal in length; the latter less loud than the first, but more so than the intermediate one. It has, moreover, a love-call, which is louder and clearer than its other notes, and can be heard at the distance of several hundred yards: it consists of three distinct notes, the last two being loudest, and is peculiar to the male. The three together resemble the words *Ah Bob White*. The first note is a kind of aspiration, and the last is very loud and clear. This whistle is seldom heard after the breeding-season, during which an imitation of the peculiar note of the female will make the male fly towards the sportsman, who may then easily shoot it. In the middle districts the love-call of the male is heard about the middle of April, and in Louisiana much earlier. The male is then seen perched on a fence stake, or on the low branch of a tree, standing nearly in the same position for hours together and calling at intervals of a few minutes. Several males may be heard from different parts of a field challenging each other; and should they meet on the ground, they fight with great courage and obstinacy, until the conqueror drives off his antagonist to another field.

"The female prepares a nest composed of grasses, arranged in a circular form, leaving an entrance not unlike that of a common oven. It is placed at the foot of a tuft of rank grass or some close stalks of corn, and is partly sunk in the ground. The eggs are from ten to eighteen in number, rather pointed at the smaller end, and of a pure white. The male at times assists in hatching them. This species raises only one brood in the year, unless the eggs or the young while yet small have been destroyed. Should this happen, the female immediately prepares another nest; and should that also be ravaged, sometimes even a third. The young run about the moment after they make their appearance, and follow their parents until spring, when, having acquired their full beauty, they pair and breed.

"At night this species rests on the ground, either amongst the grass or under a bent log. The individuals that compose the flock form a ring, and moving backwards approach each other until their bodies are nearly in contact. This arrangement enables the whole covey to take wing when suddenly alarmed, each flying off in a direct course without interfering with the rest.

"It is easily caught in snares, common dead-falls, traps and pens; many are shot, but the principal havoc is effected by means of nets.

"The ordinary food consists of seeds of various kinds, and such berries as grow near the surface of the ground, along with which they pick up a quantity of sand or gravel. Towards autumn, when the young have nearly attained their full size, their flesh becomes fat, juicy and tender, and being moreover white and extremely agreeable to the palate, is in much request."

Habitat, North America and Mexico.

The Plate represents a male, a female, and a brood of young birds, of the natural size.

ORTYX CUBANENSIS. *Gould.*





ORTYX CUBANENSIS, *Gould.*

Cuban Partridge.

Specific Character.

Ort. loris, strigâ superciliari, et gulâ albis; pectore, et abdomine superiore nigro et castaneo variegatis; lateribus rufis, guttarum serie albarum ornatis, his guttis oblongis, albis, nigro circumdatis, et ad marginem plumarum positis.

Male.—Crown of the head, ear-coverts and chest black, the latter mottled with chestnut, and the black feathers on the sides of the neck having an oblong spot of white near the tip; lores, stripe over the eye and throat white; primaries grey; tail blue-grey, minutely freckled with buff; scapularies and greater wing-coverts margined with buff; the centres of the feathers very dark brown, freckled with chestnut-brown; back and upper tail-coverts very dark brown, freckled with chestnut-brown and grey; flanks rufous, with a row of white spots on the margin of each feather, separated from the rufous tint by marks of black, these black and white marks forming a series of irregular stripes down the sides; bill black; feet flesh-colour.

Female.—Lores, stripe over the eye and throat buff; the white marks on the sides of the neck in the male replaced by buff; crown of the head and ear-coverts brown; no black mark on the chest, the feathers being similar in colour to those of the abdomen, which differ from the same part in the male in being of a paler rufous, and in having transverse arrow-head-shaped markings of black and spots of buff; in other respects the plumage assimilates to that of the male, but is of a paler hue.

Total length, 8 inches; *bill*, $\frac{1}{2}$; *wing*, $4\frac{3}{8}$; *tail*, $2\frac{5}{8}$; *tarsi*, $1\frac{1}{8}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Ortyx Virginianus, D'Orb. in Ramon de la Sagra's Hist. Nat. de Cuba, p. 182.
—— *Cubanensis*, Gould, Gray and Mitch. Gen. of Birds, vol. iii. p. 514, *Ortyx*, sp. 2.

That this bird is not identical with *O. Virginianus*, as it appears to have been considered by M. D'Orbigny, is, I think, evident from the much smaller size of the bill, the more extensive black colouring of the head, neck and chest, and the totally different markings of the flanks and abdomen; it might be considered that the more southern climate of Cuba may have been the cause of a departure from the normal plumage of the United States bird, but such an opinion would be controverted by the fact, that specimens from Jamaica, an island lying still farther south, are precisely similar to the true *O. Virginianus*.

A very fine specimen of this bird graces the Museum at Leyden, and two others are in the collection of the Zoological Society, one of which is a *lusus naturæ*, having some of the back feathers and the greater portion of the primaries white: they were brought direct from Cuba, and presented to the Society by W. S. MacLeay, Esq.

Habitat. The island of Cuba.

The figures represent the two sexes of the natural size.





ORTYX CASTANEUS, *Gould.*

Chestnut-coloured Partridge.

Specific Character.

Ort. fronte gulâque nigris ; lineâ superciliari albâ obsoletâ usque ad occiput ; pectore et lateribus saturatè castaneis ; plumis abdominalibus albis, nigro undatìm fasciatis lateralibus, guttis albis suprà nigro cinctis, ornatis.

Forehead and throat black; an indistinct line of white runs over the eye to the occiput, above this another indistinct line of black; crown of the head, back of the neck, upper part of the back, shoulders, chest and flanks, deep rich chestnut; the feathers on the sides of the neck with a black stripe down the centre and an oblong patch of white down the outer web; the tertiaries and some of the scapularies margined with deep fawn-colour, bounded within by an indistinct line of black; these feathers are also crossed with indistinct bars and freckles of black; rump and upper tail-coverts rich chestnut, minutely freckled, barred and dotted with black; feathers on the centre of the abdomen white, marked with strong zigzag bars of black, changing into spots of white, bounded above by black on the flanks, all these marks being very brilliant; eyelash dark olive; irides dark reddish hazel; bill black; legs yellowish white.

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

Ortyx castanea, Gould in Proc. of Zool. Soc., Part X. p. 182.—Gray and Mitch. Gen. of Birds, vol. iii. p. 514, *Ortyx*, sp. 4.

The only example of this species that has come under my notice, I obtained in a living state at the sale of the Collection of the late Zoological Gardens at Manchester. I must admit that I have always had a suspicion that the individual in question had assumed some unnatural style of colouring, and that it was merely a variety of *Ortyx Virginianus* or *O. Cubanensis*; but the rich chestnut colouring of the body, the black colouring of the forehead and throat, and the conspicuous markings of the sides and abdomen, are characters so different from what are observable in those species, that I have no other alternative than to describe and figure it as distinct. In size, too, it somewhat exceeds both the birds above-mentioned.

Habitat; at present unknown.

The figures are of the natural size.





ORTYX NIGROGULARIS, *Gould.*

Black-throated Partridge.

Specific Character.

Ort. gulâ nigrâ; pectore et abdomine albis, singulis plumis ad apicem lunulam nigram exhibentibus.

Crown and all the upper surface rich brown; margins of the tertiaries and wing-coverts fawn-colour; these feathers are also crossed with indistinct zigzag lines, freckles and blotches of black and blackish brown; primaries greyish brown; tail deep bluish grey, the centre feathers and the external margins of the remainder freckled with reddish brown and buff; a black stripe commencing at the base of the bill passes over the eye to the occiput; above this a stripe of white; below the eye a white line from the base of the bill to the ear-coverts, down the sides of the neck, and encircling the throat, which is jet-black; feathers of the chest and abdomen white, margined with a zone of black which is narrow on the chest, and broad and distinct on the abdomen, giving the under surface a scaly appearance; flanks, thighs and under tail-coverts sandy chestnut, the centre of each of the flank-feathers white; bill black; feet flesh-white.

Total length, 8 inches; *bill*, $\frac{9}{16}$; *wing*, $4\frac{1}{4}$; *tail*, $2\frac{1}{4}$; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Ortyx nigrogularis, Gould in Proc. of Zool. Soc., Part X. p. 181.—List of Birds in Brit. Mus. Coll., Part III. p. 44.

Numerous living examples of this pretty and strongly marked species have lately been imported into this country, some of which having passed into the possession of the Earl of Derby, have upon more than one occasion bred in his Lordship's aviary at Knowsley. As its habits in confinement very much resemble those of the *Ortyx Virginianus*, and I doubt not that in a state of nature they are also very similar. It is very common in Honduras and Yucatan, where Mr. Dyson informs me it frequents the pine ridges, moves about in coveys, and lays from eight to ten white eggs in the months of July and August. Its note, like that of its northern ally, resembles the words "Bob-White." In the "Boston Journal of Natural History," vol. iv. p. 460, I find the following remarks on this species by Dr. Samuel Cabot, Jun.:—"This bird is the same as the *Ortyx* discovered by me in Yucatan, when on a visit to that country in company with Mr. Stephens, and mentioned by me in a memorandum of the birds of Yucatan which he published in the Appendix to his second volume of 'Incidents of Travel in Yucatan,' p. 474. The mention I there made of it is very slight, and hardly sufficient to constitute any right of priority; besides which, I could not wish the name altered, as it is very well chosen, indicating the most marked feature in the appearance of the bird. But as Mr. Gould has only met with one specimen and that the dried skin of a full-plumaged male, I have thought it worth while to give as full a description of the history and habits of this bird, as a residence of seven months in their native country would enable me to do, together with descriptions of the plumage of the female and young.

"In reading works relating to the discovery and conquest of Yucatan by the Spaniards, we see mention made of the sacrifices of quails offered by the natives to their idols; sometimes the blood only was offered, and sometimes the whole body. The bird there alluded to is undoubtedly the *Ortyx nigrogularis*, as this is the only bird called *Codorniz* or Quail by the Spanish residents of the country. The *Ortyx nigrogularis* in its note and habits is precisely similar to the *O. Virginianus*. They whistle the Bob-White in the spring: their covey-call in the autumn and winter is so precisely the same, that they readily answered when I whistled the call of our quail; and if I had previously scattered the covey, I could always find them in this way. They feed on similar food, and roost in the same way; they also sometimes alight on trees, as our quail. These birds are taken by the Indian boys, in traps similar to those used in taking our quail, and brought alive in great numbers to the markets of the large towns of Yucatan. The throat of the young male is light-coloured, nearly white, and it resembles very closely the young *O. Virginianus*. It does not get its full plumage till late in winter. I have the skin of a young male among my specimens which has light-coloured feathers among the black of the throat; this specimen was killed in the latter part of the month of

December, at which time I killed a great number, with more or less light colour on their throats. The Maya or Indian name of this bird is Bêch, the *e* pronounced with a guttural sound.

"The female has the top of the head, back of neck, back, rump, upper tail-coverts dark brown, with buff, reddish brown and black intermixed; edges of wing-coverts very light buff, almost white; throat, chin, line extending across the forehead, and between the bill and eyes to cheek, line over eyes, along superciliary ridges to nape, deep buff or yellowish brown; feathers of the breast, flanks and belly not fringed with black, as in the male, but having light reddish colour at the part next the quill, then a pointed mark of very dark brown on some feathers almost black, then a large spot of very light buff on some feathers white, then a slight tip of dark brown on margin. The light spots on the breast are smaller than those on the abdomen. There are large spots of reddish and dark brown on flank-feathers; under tail-coverts nearly white, with a lanceolate spot of dark brown or black along the middle of each; legs light flesh-coloured; primaries ash-brown; eyes of both male and female hazel."

Habitat. Honduras and Yucatan.

The figures are those of two males and a female of the natural size.

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ORTYX PECTORALIS, *Gould.*

Black-breasted Partridge.

Specific Character.

Ort. lineâ angustâ albâ frontali super oculos et per nucham ductâ; gulâ albâ; pectore nigris; abdomine, lateribus et crisso, cervinis.

Crown of the head and back of the neck blackish brown; a narrow stripe of white crosses the forehead, passes over the eye, and extends down the back of the neck below the occiput; ear-coverts, sides of the neck and chest, black; throat white; abdomen, flanks and under tail-coverts fawn-colour; the tips of the feathers on the lower part of the flanks spotted with black and white; the upper part of the back, scapularies and shoulders chestnut-brown; wing-coverts, tertiaries, back and upper tail-coverts greyish brown; all the feathers of the upper surface margined and speckled with very light fawn-colour, which on the secondaries assumes the form of distinct bars; in addition to these marks, the scapularies, secondaries, back and rump are minutely freckled with brown; the strongly contrasted markings giving all the upper surface a bespangled appearance; primaries brownish grey; tail-feathers bluish grey, some of them freckled on the margin with buff; bill black; feet flesh-white.

Total length, 8 inches; *bill*, $\frac{1}{2}$; *wing*, 4; *tail*, $2\frac{1}{8}$; *tarsi*, $1\frac{1}{8}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Ortyx pectoralis, Gould in Proc. of Zool. Soc., Part X. p. 182; Gray and Mitch. Gen. of Birds, vol. iii. p. 514, *Ortyx*, sp. 6.

This well-defined species of *Ortyx* is a native of Mexico, but what particular province it inhabits I am unable to say: it is a smaller bird than *O. Cubanensis*, and differs from that species in the total absence of any marks on the flanks and abdomen, which are of uniform fulvous. It is a rare bird in the European collections, but there is a fine example in the Museum of the Earl of Derby, and a tolerably good one in that of Leyden: it is from these individuals that my figures were taken. The Earl of Derby's bird was living in his fine Aviary in 1840.

Habitat. Mexico.

The figures represent males of the natural size; I am unacquainted with the female.

ORTYX COYOLCOS.





ORTYX COYOLCOS.

Coyolcos Partridge.

Specific Character.

Ort. gulâ nigrâ, pectore, et corpore inferiore castaneo-rufis.

Forehead, sides of the neck and throat black; over and behind the eye an obscure line of buffy white; back of the neck chestnut-brown, with oblong spots of white; upper surface reddish brown, each feather crossed with dark brown, and spotted on the margin with buffy white; primaries brown; tail slate-grey, the centre feathers freckled with white; chest and all the under surface chestnut-red; bill black; feet fleshy brown.

Total length, $7\frac{1}{2}$ inches; *bill*, $\frac{9}{16}$; *wing*, $3\frac{7}{8}$; *tail*, $2\frac{3}{8}$; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{3}{16}$.

Perdix Coyolcos, Lath. Ind. Orn., vol. ii. p. 653?—Bonn. et Vieill. Ency. Méth. Orn., Part I. p. 215?
Tetrao Coyolcos, Gmel. Syst., vol. i. p. 763?
Coturnix Mexicana, Briss. Orn., tom. i. p. 256.—Ib. 8vo Edit., tom. i. p. 71?
Coyolcozque, seu Cali sonalis, Ray, Syn. Av., p. 158?
Coturnix Indica, Willoughby, Orn., p. 304?
Le Coyolcos, Buff. Ois., tom. ii. p. 486?
Lesser Mexican Quail, Lath. Gen. Syn., vol. iv. p. 786?—Ib. Gen. Hist., vol. viii. p. 327?
Ortyx Coyolcos, Gray and Mitch. Gen. of Birds, vol. iii. p. 514, *Ortyx*, sp. 3.
Coyolcozque of the Mexicans.

This is one of the least and one of the rarest species of *Ortyx* with which I am acquainted; its jet-black throat, the deep and uniform chestnut colouring of its under surface, and the nearly obsolete line of buffy white which surmounts the eye, serve at once to distinguish it from all its congeners; it is moreover characterized by the possession of a small and short crest, not well shown in my drawing, but which is very apparent when erected. Occasionally specimens occur without a trace of the line over the eye, that part being black like the throat. Although I have figured this bird as identical with the *Perdix Coyolcos* of Latham and the older authors, their descriptions are so indefinite that it is by no means certain that such is the case.

Habitat. Mexico; locality Tabasco, according to the label attached to a fine specimen obligingly lent to me by M. Le Viscomte DuBus of Brussels, in the Royal Museum of which city it may be seen.

The figures are of the natural size; one of them may represent the female, with which sex I am unacquainted.





CYRTONYX MASSENA.

Massena's Partridge.

Specific Character.

Cyrt. pectore abdomineque medio castaneis, lateribus corporis nigrescenti-griseis, maculis albis guttatis, plumarum dorsi rachiis longitudinaliter fulvo striatis.

Male.—Head ornamented with a full crest inclining backwards, and forming a thick tuft at the occiput of a uniform buffy brown; feathers of the crown buff, transversely marked with black; sides of the head white, interrupted by a narrow stripe of black, which, commencing at the base of the bill, passes upward and curves over the eyes; another stripe of black takes its rise from the same point, passes beneath the eye, and then descends abruptly down the side of the neck; ear-coverts, centre of the throat and a crescent-shaped mark bounding the white below, black; upper surface sandy brown, transversely barred with black, each feather with a narrow stripe of buff down the centre; wing-coverts and tertiaries buffy brown, barred transversely with broad oblong spots of black; primaries dark brown, the outer webs crossed with markings of buff; centre of the chest and abdomen deep chestnut; flanks for their entire length sooty black, each feather ornamented with a double row of nearly round spots of white; vent, thighs and under tail-coverts black; upper mandible black; under mandible horn-colour; legs bluish flesh-colour.

Female.—All the upper surface sandy brown, transversely barred with black, and a conspicuous stripe of buff down the centre of each feather; throat dull white; an indication of the black crescent-shaped mark on the lower part of the neck; under surface vinaceous; flanks in some specimens uniform, in others crossed by minute zigzag markings and freckles of black.

Total length, $7\frac{1}{2}$ inches; *bill*, $\frac{1}{2}$; *wing*, $4\frac{1}{2}$; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{3}{8}$.

Ortyx Massena, Less. Cent. de Zool., p. 189.—Ib. Ill. de Zool., texte de pl. 52.
—— *Montezumæ*, Vig. in Zool. Journ., vol. v. p. 275.—Jard. and Selb. Ill. Orn., vol. iii. pl. 126.—Bonap. in Proc. of Zool. Soc., Part V. p. 114.—Natt. MSS.
Odontophorus Meleagris, Wagl. Isis, 1832, p. 277.
Perdix perspicillata, Licht. in Mus. Berlin.

Several years have now elapsed since I became possessed of a collection of birds from Mexico, among which were specimens of what I conceive to be both sexes of this extraordinarily marked species, and I have since seen others in the Royal Museum of Berlin, and in that of the Prince Massena at Paris. The first-mentioned specimens now form part of the collection of the Zoological Society of London, in whose aviary in the Regent's Park another individual was living for some time.

No account whatever has yet reached us of the habits and economy of this species, which, judging from the comparative shortness of its toes and the great development of its claws, we may expect to be different from those of the other members of the family.

The male is rendered exceedingly conspicuous by the singular disposition of the markings of the face, which are very strongly contrasted, and forcibly remind one of the painted face of the clown in a pantomime; the female on the other hand is very different in colour, and in the markings of the upper surface closely resembles the Common Quail of Europe.

Habitat, Mexico.

I am indebted to the kindness of Prince Massena for the loan of a fine specimen of this bird, from which my figure of the male was taken.

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



CYRTONYX OCELLATUS: Gould.

Hallmandel & Walton Imp.



CYRTONYX OCELLATUS, *Gould.*

Ocellated Partridge.

SPECIFIC CHARACTER.

Cyrt. abdomine medio pallidè castaneo; lateribus inferioribus splendidè castaneis transversim nigro fasciatis; corporis superioris plumis singulis lineâ latâ centrali ad apicem latiore ornatis.

Bill black, strong and arched; top of the head, which is slightly crested, blackish brown; a large white mark extends over each eye and passes on to the back part of the neck; beneath the eye is an oval mark of bluish black; from the base of the lower mandible extends another white mark which spreads upon the front of the neck and is bounded by an abrupt margin of black; a large patch of the latter colour occupies the chin and throat; the general colour of the whole of the upper surface is brownish olive, each feather having a decided central line of chestnut following the direction of the shaft and becoming spatulate at the tip; the web of each feather is transversely barred and blotched with black; the chest and abdomen are sandy chestnut, becoming more intense on the under tail-coverts; sides of the chest and flanks transversely spotted with yellowish white on a bluish grey ground; thighs black; tail very short and partly hidden; tarsi brown.

Total length, $6\frac{1}{2}$ inches; *bill*, $\frac{5}{8}$; *wing*, $4\frac{1}{2}$; *tail*, —; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{2}$.

Ortyx ocellatus, Gould in Proc. of Zool. Soc., Part IV. p. 75.

Two examples of this bird are all that have come under my notice; of these, the one from which my description was taken is in the Museum of the Zoological Society of London, and the other, an exceedingly fine specimen, in that of the Jardin des Plantes. It is very nearly allied to the *Cyrtonyx Massena*, but differs from that species in having the black marks on the face larger and more conspicuous, in the brighter chestnut of the lower part of the abdomen, and in the stripes down the centres of the feathers of the upper surface being chestnut instead of buff; it differs also in the greater development of the secondaries and tertiaries, which are so much lengthened, that when the wing is closed the tail is scarcely distinguishable.

I regret to say that nothing whatever is known of its history.

Habitat. Guatemala.

The figures are of the natural size.



EUPSYCHORTYX CRISTATUS.

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



EUPSYCHORTYX CRISTATUS.

Crested Partridge.

Specific Character.

Eup. lineâ superciliari nigrâ; gutture pallide fulvo, pectore albo guttato, guttis singulis posticè nigro marginatis.

Male.—Forehead, crest and throat buff; ear-coverts white; a broad black mark above and another below the ear-coverts; sides of the breast strongly marked with black and white; mantle finely freckled with reddish brown, buff and black; centre of the back and scapularies blotched and freckled with chestnut-grey and black; the feathers bordered, particularly the tertiaries, with buff; primaries light brown; tail grey, minutely freckled and barred with zigzag lines of buff and brown; chest spotted with white posteriorly, bounded with black, on a reddish chestnut ground; abdomen rusty orange-red; the lower part crossed with a few indistinct bars of red; flank-feathers white at the base, crossed by broad bars of black, tipped with buffy orange, and with a line of orange-red in the direction of the stem; bill black; irides brown; feet greyish white.

Female.—Forehead, crown, crest and ear-coverts brown; throat and line above the ear-coverts greyish white; tail strongly barred with zigzag lines of black; centre of the abdomen buffy white; the remainder of the plumage very similar to that of the male, but the markings not so well defined, and the flanks, which are dull light buff, destitute of spots.

Total length, $7\frac{1}{2}$ inches; *bill*, $\frac{1}{2}$; *wing*, 4; *tail*, $2\frac{1}{2}$; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Tetrao cristatus, Linn. Syst. Nat., vol. i. p. 277.—Gmel. Syst. Nat., vol. i. p. 765.
Perdix cristata, Lath. Ind. Orn., vol. ii. p. 652.—Temm. Pig. et Gall., tom. iii. pp. 446 and 736.
Coturnix Mexicana cristata, Briss. Orn., tom. i. p. 260. tab. 25. fig. 2.—Id. 8vo, tom. i. p. 72.—Gerin., tom. iii. pl. 246.
Coturnix Indica, Ray, Syn., p. 158.—Will. Orn., p. 304.
Zonecolin, Buff. Ois., tom. ii. p. 485.—Ib. Sonn. Edit., tom. vii. p. 118.
Caille huppée du Mexique, Buff. Pl. Enl., 126. fig. 1.
Crested Quail, Lath. Gen. Syn., vol. iv. p. 784.—Ib. Gen. Hist., vol. viii. p. 329.
Coturnix cristata, Bonn. et Vieill. Ency. Méth. Orn., Part I. p. 222. pl. 96. fig. 4.
Ortyx Temminckii, Steph. Cont. of Shaw's Gen. Zool., vol. xi. p. 381.
Ortyx cristata, Jard. and Selb. Ill. Orn., vol. i. Gen. *Ortyx*.—Less. Traité d'Orn., p. 508.—Ib. Ill. de Zool., texte de pl. 52.
Ortyx neoxenus, Vig. in Proc. of Comm. of Sci. of Zool. Soc., Part I. p. 3.—Aud. Syn., p. 200. Ib. Birds of Am., vol. iv. pl. 423. fig. 3. female.—Benn. Gard. and Menag. of Zool. Soc., vol. ii. p. 311.
Perdix neoxenus, Aud. Orn. Bio., vol. v. p. 228.
Welcome Partridge, Aud. Birds of Am., 8vo, vol. v. p. 71. pl. 292.
Ortyx cristatus, List of Birds in Brit. Mus. Coll., Part III. p. 44.

It will be seen from the long list of synonyms given above that this species has been included in the works of nearly every writer on ornithology; yet, strange to say, in no instance has any account been given of its habits and manners, and I regret that although it is one of the species most commonly met with, I cannot myself communicate any information on those points. Numerous living examples have from time to time adorned our menageries, and in all probability it might with suitable care be readily naturalized in Britain; at all events if our island should prove too cold for it, there can be no doubt that it would thrive in the warmer countries of Europe, such as Spain, the south of France and similar localities. It is one of the prettiest members of the genus, and is very sprightly and animated in all its actions.

The living examples from which Mr. Vigors took his description of *Ortyx neoxenus* proved on examination after death to be all females, and upon carefully comparing them with females of this species, received direct from Mexico, I have no doubt of their identity; hence I have placed his name among the synonyms of this bird.

Habitat. Mexico.

The Plate represents the two sexes of the natural size.





EUPSYCHORTYX LEUCOTIS.

White-eared Partridge.

SPECIFIC CHARACTER.

Eup. plumis auricularibus albis; gulâ saturatè castaneâ; strigâ supraciliari angustâ nigrâ pectore et lateribus castaneis, guttis albis distinctis, nigro circumdatis, conspicuè ornatis.

Adult Male.—Face, crest and ear-coverts white, slightly tinged with buff; throat dark chestnut; stripe from over the eye down each side of the neck chestnut, speckled with black; stripe down the back of the neck buff, speckled with black; sides and back of the neck spotted black and white; all the upper surface, wings and tail greyish brown, very minutely freckled with dark brown and greyish white; centre of the back blotched with black; inner webs of the scapularies and secondaries dark brown, margined internally with buff, forming a line in the direction of the body when the wing is closed; under surface chestnut, distinctly spotted with white, the spots separated by black; under tail-coverts buff, with a black mark down the centre of each; middle of the abdomen reddish chestnut; bill black; feet flesh-colour.

Young Male.—Crest and ear-coverts brown; head and throat striated with rufous and black; spots on the back stronger than in the adult; under surface similar, but much less rich, and the centre of the abdomen deep buff.

Female.—Crest and ear-coverts brown; sides of the head and the under surface pale buff, spotted and blotched with brown and black; centre of the abdomen wholly buff; upper surface pale brown, crossed by numerous narrow freckled bars of white; tail crossed by six or eight similar bars.

Total length, $8\frac{1}{4}$ inches; *bill*, $\frac{5}{16}$; *wing*, $4\frac{1}{4}$; *tail*, $2\frac{1}{2}$; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Ortyx leucotis, Gould in Proc. of Zool. Soc., Part XI. p. 133.

THE present species is one of the novelties that have rewarded the late researches of naturalists among the heretofore little-explored regions of the Andes. Numerous specimens transmitted from Sta Fé de Bogota have from time to time come under my notice.

In point of affinity, the White-eared Partridge is more nearly allied to the *Eupsychortyx cristatus* than to any other member of the group; from which, however, it differs in many particulars, and is altogether a much more beautifully marked species. The well-defined spotting of the chest and abdomen, contrasted as it is with the rich chestnut colouring of the remainder of the feathers of those parts, and the deep chestnut brown of the throat, are characters by which it may at all times be distinguished.

A comparison of the accompanying illustration, which represents a male, a female, and a young bird of the natural size, with that of *Eupsychortyx cristatus*, will, however, enable the reader to perceive these differences and characters far more readily than the most lengthened description.

Of the history of this species nothing is at present known.

Habitat, Sta Fé de Bogota.





EUPSYCHORTYX SONNINII.

Sonnini's Partridge.

Specific Character.

Eups. cristâ recurvatâ; hâc sic et plumis auricularibus cervinis; pectore vinaceo vel rubescenti-cinereo, fusco minutè adsperso.

Male.—Face buffy white; crest brownish buff; throat and stripe over the eye and down the sides of the neck rusty red; sides of the neck strongly marked with black and white; mantle finely freckled with reddish brown, buff and black; upper surface generally blotched and freckled with chestnut-black and grey, the feathers, especially the inner edge of the tertiaries, margined with buff; tail brownish grey, minutely freckled and barred with zigzag lines of buff and blackish brown; primaries light brown; chest vinaceous or reddish grey, very minutely freckled with brown; the remainder of the under surface, flanks and under tail-coverts chestnut, each feather with six large spots of white, three on the margin of either web separated by black; bill black; irides dark brown; feet greyish white.

Female.—Crown of the head, ear-coverts and crest brown; throat and stripe over the eye deep grey, tinged with buff, each feather slightly margined with brown; feathers of the chest and flanks buff, the former crossed in the middle with a strongly defined arrow-head-shaped mark of black, the latter crossed by three somewhat triangular-shaped marks of the same colour, intermingled with buff; flank markings not so defined as in the male; upper surface as in that sex, but the ground colour paler and the black patches larger and of a deeper hue.

Total length, 8 inches; *bill*, $\frac{9}{16}$; *wing*, $4\frac{1}{4}$; *tail*, $2\frac{5}{8}$; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Coturnix fronte sordida, Rozier, Journ. de Phys. 1772, tom. ii. part i. p. 217. pl. 2.
Perdix Sonninii, Temm. Pig. et Gall., pp. 451 and 737.—Ib. Pl. Col., 75.
La Caille de Cayenne, Sonn. Edit. Buff. Ois., tom. vii. p. 133.
Sonnini's Quail, Lath. Gen. Hist., vol. viii. p. 328.
Ortyx Sonninii, Steph. Cont. of Shaw's Gen. Zool., vol. xi. p. 383.—Jard. and Selb. Ill. Orn., vol. i. Gen. *Ortyx*.—Less. Traité d'Orn., p. 508.—Ib. Ill. de Zool., texte de pl. 52.—Gray and Mitch. Gen. of Birds, vol. iii. p. 514, *Ortyx*, sp. 8.
Coturnix Sonninii, Vieill. 2nde Edit. du Nouv. Dict. d'Hist. Nat., tom. xxv. p. 248.—Ib. Ency. Méth. Orn. part i. p. 369.

This species appears to have been described and figured as long ago as 1772, by the Abbé Rozier in the "Journal de Physique," but to have escaped the notice of ornithologists generally, until M. Temminck characterized it in his "Pigeons et Gallinacées" under the name of *Perdix Sonninii*, the appellation assigned to it by the Abbé not being retainable according to the rules of modern nomenclature. It is of the same size as *Eupsychortyx cristatus*, but is distinguished from that species by the absence of spots on the chest, which part is of a uniform vinaceous or reddish grey.

Habitat. Guiana, Caraccas, and the southern provinces of Mexico, from all of which countries I have seen specimens. M. Natterer states that it is also to be found "in the bushes of the prairies on the banks of the Rio Branco in Brazil."

The figures represent the two sexes of the size of life.





EUPSYCHORTYX PARVICRISTATUS, *Gould.*

Short-crested Partridge.

Specific Character.

Eups. cristæ plumis brevibus, rectis, ad apicem rotundatis, fuscis; plumis auricularibus fuscis; pectore vinaceo vel rubescenti-cinereo, et fusco minutissimè guttato.

Male.—Crest short, straight, light brown tipped with buff; forehead buff; throat and a broad stripe down each side of the head, above and behind the eye, rusty red; ear-coverts brown; collar surrounding the neck, narrow in front and broad behind, black, spotted with white and stained with chestnut; centre of the back, between the shoulders, minutely freckled grey, brown and black; remainder of the back blackish brown, each feather freckled on the margin with grey; scapularies freckled grey and brown, and ornamented on their inner webs with large patches of dark brown; wing-coverts freckled, and with a large spot of dark brown and another of white near the extremity of each feather; primaries light brown fringed with greyish white, and a few indistinctly barred with freckles of the same on their outer webs; tail brown, crossed by narrow freckled bands of whitish and darker brown; across the breast a band of greyish red blotched with a darker tint; breast rufous, each feather with six spots of light buff encircled with dark brown, the spots gradually increasing in size on the flanks and lower part of the abdomen, and the rufous tint changing into blackish brown; vent buff; under tail-coverts like the abdomen, but the markings less distinct; bill black; feet black.

Female.—Crown of the head and crest very dark brown, the tips of the latter reddish brown; throat and stripe over the eye sandy buff, streaked with black; feathers of the chest buff at the tip and crossed in the middle with an arrow-shaped mark of black; flanks spotted as in the male, but less brilliant; the upper surface is also similar but paler.

Total length, 8 inches; *bill*, $\frac{1}{2}$; *wing*, $3\frac{3}{4}$; *tail*, $2\frac{3}{8}$; *tarsi*, $1\frac{1}{8}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Ortyx parvicristatus, Gould in Proc. of Zool. Soc., Part XI. p. 106.—List of Birds in Brit. Mus. Coll., Part III. p. 44.

This species is very nearly allied to *E. Sonninii*, but is of a much larger size, and may, moreover, be distinguished from that bird by the brown colour of the ear-coverts, by the short, straight, broad and flat form of its crest-feathers, and by the bolder style of the markings of the flanks. Numerous examples have lately been imported into this country, but nothing has yet been recorded of its habits or economy.

Habitat. The Columbian Andes.

The figures represent the two sexes of the natural size.



EUPSYCHORTYX LEUCOPOGON.

Hullmandel & Walton Imp.

EUPSYCHORTYX LEUCOPOGON.

White-faced Partridge.

Specific Character.

Eups. facie, strigâ superciliari, et gulâ albis plumis auricularibus fuscis; pectore sparsìm, lateribus conspicuè, guttis rotundatis albis, notatis, super colorem pallidè castaneum.

Face, stripe over the eye and throat white; crest and ear-coverts brown; back of the neck rufous brown; sides of the neck spotted with black and white; chest vinaceous or reddish brown, minutely freckled with black and irregularly spotted with white encircled with black; abdomen and flanks chestnut, ornamented with large spots of buffy white separated by black; mantle and all the upper surface vinous chestnut-red, freckled and crossed with zigzag lines of black and buff; tertiaries broadly margined interiorly with buff; tail grey, crossed with zigzag markings of buff and freckled with the same colour; bill black; feet fleshy brown.

Total length, $7\frac{1}{2}$ inches; *bill*, $\frac{1}{2}$; *wing*, 4; *tail*, $2\frac{1}{2}$; *tarsi*, $1\frac{1}{8}$; *middle toe* and *nail*, $1\frac{1}{8}$.

Ortyx leucopogon, Less. Rev. de Zool., 1842, p. 175.—Gray and Mitch. Gen. of Birds, vol. iii. p. 514, *Ortyx*, sp. 12.—O. des Murs, Icon. Orn., pl. 36.

This species is distinguished from every other member of the genus *Eupsychortyx* by its white face and throat, and the peculiar spotted markings of the chest.

I am indebted to the Baron de la Fresnaye for the use of the specimen from which the above characters are taken; it is the only one that has come under my notice.

The bird has been figured by M. O. des Murs in his "Iconographie Ornithologique" without any indication of the crest, an omission I cannot account for, as it was very apparent in the specimen above referred to, and is moreover a character common to all the species of the genus.

Habitat. San Carlos in Central America.

The figures represent males of the natural size; the female I have never seen.



PHILORTYX FASCIATUS, *Gould.*

Fasciated Partridge.

Specific Character.

Phil. cristæ plumis elongatis, nigris, apicibus fuscis; pectore et abdomine fasciis transversis nigris atque albis, conspicuè notatis; uropygio et caudâ cinereis fasciis interruptis nigris atque cinereo-albis transversim undulatis.

Forehead reddish brown; crest deep brownish black, tipped with reddish brown; chin greyish white; ear-coverts brown; sides and back of the head light brown, minutely freckled with darker brown and white; all the upper surface greyish brown, minutely freckled with darker brown and white, the coverts and scapularies passing into black towards the extremity of each feather, and crossed at the tip with a narrow band of buff; tail similarly marked, but browner than the upper surface and crossed by numerous freckled irregular double bars of dark brown and greyish white; primaries brown, with lighter edges; all the under surface brownish black, each feather crossed at the tip with a broad band of pure white, which, becoming gradually wider on the centre of the abdomen, leaves that part white; on the breast the white marks are very faint, and the feathers are tinged with rufous; thighs buff; under tail-coverts light buff, with two blackish brown spots down the centre of each feather; bill black; feet flesh-colour.

Total length, $8\frac{1}{2}$ inches; *bill*, $\frac{5}{8}$; *wing*, $4\frac{1}{4}$; *tail*, 3; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Ortyx fasciatus, Natt. MSS.—Gould in Proc. of Zool. Soc., Part XI. p. 133.

This is certainly one of the most interesting members of the group that has lately been discovered; being not only a very elegant and beautiful bird in itself, but rendered remarkably distinct from every other species of the family by the totally different style of its markings, and by the broad and truncated form of its feathers, which much resemble those of some of the Tree Grouse (genus *Bonasa*).

I am indebted to the kindness and liberality of His Highness The Prince Massena, of Paris, and of the Chevalier Du Bus of Brussels, for the loan of the beautiful examples from which my figures were taken. I learn from the last letter received from my lamented friend Mr. John Natterer, that a specimen had been purchased by him in Berlin, and now doubtless forms part of the Imperial Collection at Vienna.

Habitat. Mexico.

The figures are of the natural size.



CALLIPEPLA PICTA.

Plumed Partridge.

Specific Character.

Call. capite, plumis duabus elongatis, et gracilibus cristam pendentem nigram efficientibus ornato; gulâ saturatè castaneâ, ad latera albo marginatâ, pectore cinereo; abdomine splendidè castaneo fasciis nigris et fulvis transversim notato.

Head ornamented with two long slender arched black feathers, rising from the vertex and inclining towards the back; crown of the head, back of the neck and chest deep ash-grey; throat deep chestnut, bounded on the sides by a line of white, and immediately beneath the eye by a smaller streak of black; lores dull white; all the upper surface olive-brown; tail brown, freckled with a darker tint; primaries brown, margined with a lighter tint; sides and abdomen deep chestnut, the outer line of feathers above edged with white; on each side of the abdominal line the feathers are strongly and elegantly marked with alternate bands of black and white.

Total length, $9\frac{3}{4}$ inches; *bill*, $\frac{3}{4}$; *wing*, $5\frac{1}{4}$; *tail*, $3\frac{1}{2}$; *tarsi*, $1\frac{3}{4}$; *middle toe* and *nail*, $1\frac{3}{4}$.

Ortyx picta, Doug. in Linn. Trans., vol. xvi. p. 167.—Vig. in Zool. Journ., vol. iv. p. 490.—Less. Ill. de Zool., texte de pl. 52.—Jard. and Selb. Ill. Orn., vol. i. Gen. *Ortyx*.

Ortyx plumifera, Gould in Proc. of Zool. Soc., Part V. p. 42.—Ib. in Icones Avium.

Perdix plumifera, Aud. Birds of Am., vol. iv. pl. 422. figs. 1 and 2.—Ib. Orn. Bio., vol. v. p. 226.

Plumed Partridge, Aud. Birds of Am., 8vo, vol. v. p. 69. pl. 291.

For the discovery of this highly ornamental species we are indebted to the researches of the late Mr. David Douglas, in whose baggage three specimens were found after his lamented and untimely death. It will be seen by the synonyms given above, that I some years since characterized this bird under the name of *Ortyx plumifera*, not being at the time aware that Mr. Douglas had previously described a bird of this genus (from the notes made during his first journey) in the sixteenth volume of the "Linnean Transactions" under the appellation of *Ortyx picta*, which in all probability is identical with the present species. Although his description does not accord in every particular with the birds characterized by me, and which are in the collection of the Zoological Society, little doubt remains on my mind that his description is intended for the present bird: I therefore retain his name of *picta*, and allow that of *plumifera* to sink into a synonym.

"From October until March," says Mr. Douglas, "these birds congregate in vast flocks, and seem to live in a state of almost perpetual warfare; dreadful conflicts ensue between the males, which not unfrequently end in the destruction of one or both combatants, if we may judge from the number of dead birds daily seen plucked, mutilated and covered with blood. When feeding they move in compact bodies, each individual endeavouring to outdo his neighbour in obtaining the prize. The voice is *Quick-quick-quick*, pronounced slowly, with a gentle suspension of the voice between each syllable. At such times, or when surprised, the crest is usually thrown forward over the beak, and the reverse when retreating, being brought backwards and laid quite close on the back. Their favourite haunts are dry upland or undulating gravelly or sandy soils in open woods, or coppice thickets of the interior; but during the severity of winter, when the ground is covered with snow, they migrate in large flocks to the more temperate places in the immediate vicinity of

the ocean. Seeds of *Bromus altissimus*, *Madia sativa*, and a tribe of plants allied to *Wedelia*, catkins of *Corylus*, leaves of *Fragaria*, and various insects are their common food. Nest on the ground in thickets of *Pteris*, *Aspidium*, *Rubus*, *Rhamnus*, and *Ceanothus*, neatly built with grass and dry leaves, secreted with so much caution, that without the help of a dog they can hardly be found. Eggs 11 to 15, yellowish white, with minute brown spots; large in proportion to the bird. Pair in March. Common in the interior of California, and during the summer months extending as far northward as 45° north latitude, that is, within a few miles of the Columbian valley. Several pairs, male and female, which I prepared with great care in the interior of California, in November 1826, I had the misfortune (too painful to dwell upon) to lose, with a multitude of treasures, botanical and zoological, crossing one of the rapid tributary streams of the river *Multnomah*, near its source in the mountains, on my return northwards. On this occasion I lost the labour of fifty-four days of fatigue and anxiety, the too frequent attendants of such undertakings."

Mr. Douglas states that the female differs from the male in having the head and breast light fuscous brown, the middle of the feathers black; the crest half an inch long; the throat whitish or light grey; the belly light grey waved with black, less bright than the male, and the under coverts of the tail foxy-red; but after due consideration of the subject I am of opinion that this must be the description of the female of some other bird, or that the *O. picta* of Mr. Douglas must be distinct from the birds here represented, the smaller of which I am induced to regard as a female, in consequence of her being less brilliant in all her markings, and having a much shorter crest; indeed it is only my desire to secure to this gentleman, who has done so much in the cause of science, all the merit that may be due to him, that induces me to treat his *O. picta* as identical with my *O. plumifera*, and to retain his name in preference to my own.

Habitat, California.

The figures are of the natural size.



CALLIPEPLA CALIFORNICA.

Californian Partridge.

Specific Character.

Call. capite cristâ plenâ nigrâ, super rostrum acclinatâ ornato; gulâ nigrâ albo circumdatâ, collo posticè et ad latera plumbeo, singulis plumis nigro marginatis, et ad apicem albo guttatis; abdomine superiore fulvo, medio castaneo, singulis plumis lunulâ nigrâ apicali.

Male.—Forehead straw-colour, with a very fine line of black down the centre of each feather; throat deep velvety black, encircled from the posterior angle of the eye with a broad line of white; across the head and passing down behind the eye another line of white, bounded posteriorly by black; occiput umber-brown; crest deep velvety black; feathers of the back and sides of the neck lanceolate in form, and of a blue-grey bordered all round with black, and with a minute spot of white at the extremity of each; back, rump, upper tail- and wing-coverts olive-brown; tertiaries edged with buff, narrowly on their outer webs and broadly on their inner ones; tail grey; chest blue-grey; upper part of the abdomen rich buff, centre of the abdomen chestnut, all the feathers with a crescent-shaped line of black at the extremity; flank-feathers olive-brown, with a line of buffy white down the centre, and a second broader, oblique line of buff on the outer web of each; under tail-coverts sandy buff, with a broad stripe of greyish brown down the centre of each; bill black; feet grey.

Female.—Forehead dirty white, streaked with brown; crest brownish grey; feathers of the abdomen buffy white, with a crescent-shaped mark of black at the tip; feathers of the sides and back of the neck less decidedly marked; under surface destitute of the buff and chestnut markings which are so conspicuous in the male.

Total length, $9\frac{1}{2}$ inches; *bill*, $\frac{1}{2}$; *wing*, $4\frac{1}{2}$; *tail*, 4; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Crested Partridge of New California, La Pér. Voy., vol. i. p. 201.

Perdix Californica, Lath. Ind. Orn. Supp., pl. lxii.—Temm. Pig. et Gall., p. 738.

Californian Quail, Lath. Gen. Syn. Supp., p. 281.—Ib. Gen. Hist., vol. viii. p. 328.

Tetrao Californica, Shaw, Nat. Misc., pl. 345.

Ortyx Californica, Steph. Cont. of Shaw's Gen. Zool., vol. xi. p. 384.– Less. Ill. de Zool., texte de pl. 52.—Aud. Birds of Am., vol. iv. pl. 418.

Ortyx Californicus, Less. Cent. de Zool., p. 188. pl. 60.—Benn. Gard. and Menag. of Zool. Soc., vol. ii. p. 29.

Coturnix Californica, Vieill., 2nd Edit. du Nouv. Dict. d'Hist. Nat., tom. xxv. p. 259.—Ib. Ency. Méth. Orn., Part I. p. 367.

Ortyx Californica? Jard. and Selb. Ill. Orn., vol. i. Gen. *Ortyx*.

Lophortyx Californica, Bonap. List of Birds of Eur. and Am., p. 42.—G. R. Gray, List of Gen. of Birds, 2nd Edit., p. 80.

This species, which is second to no member of the group in beauty, is rendered remarkable by the peculiar form of the crest, which, rising in a fine point at the vertex of the head, gradually increases in breadth

towards the tip, where it assumes a curled form and moreover inclines forwards over the bill; it is also conspicuous for the contrasted style of its markings.

Until of late years this bird was one of the greatest rarities of our collections, but is now becoming more common. As I have nothing to add to the interesting account of it given by my lamented friend the late E. T. Bennett, Esq., in the second of his admirable volumes on the Gardens and Menagerie of the Zoological Society, I cannot do better than quote his own words.

"For the first notice of these beautiful birds we are indebted to the editor of the Voyage of the unfortunate La Pérouse, who gave a figure of them in the Atlas to that work, merely mentioning in the text that they were plentiful in the low woods and plains of California, where they assembled in bands of two or three hundred, and became fat and well-flavoured. Preserved skins were about the same time brought to England by Mr. Archibald Menzies, who accompanied Vancouver in his expedition round the world, and who returned to Europe rich in the natural productions of the western coast of America in particular. One of these, deposited in the British Museum, was described and figured by Dr. Shaw in his 'Zoological Miscellany,' and again by Dr. Latham in the 'Second Supplement to his General Synopsis'; but the bird was still very imperfectly known in this quarter of the globe, until Captain Beechey brought over with him, on his return from his voyage of discovery, a number of living specimens. Unfortunately all the females died on the passage, and of the males which were presented by that gentleman to the Society, one alone survives. Their manners seem to be identical with those of the Quails and Partridges, but they have a much more erect and graceful bearing. They are perfectly contented in captivity and bore the change of climate well; it is therefore much to be regretted that the prospect of naturalizing a bird so neat in its form and markings, and so highly spoken of as an article of food, should have been frustrated for the present, although by unavoidable contingencies."

Specimens of this species occur in the collection formed by R. B. Hinds, Esq., during the late voyage of H.M.S. Sulphur.

Habitat, California and Mexico.

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



CALLIPEPLA GAMBELII.

Gambel's Partridge.

Specific Character.

Call. loris, gutture et cristâ nigris; hâc erectâ, paululùm recurvatâ, nequidèm ut in C. Californicâ, *abdomine inferiore nigro pone lunulam latam cervinam; lateribus nitidè castaneis, singulis plumis strigâ albâ centrali notatis.*

Forehead, chin and throat deep velvety black, encircled from the posterior angle of the eye with a broad line of white; across the head and passing down behind the eye another line of white, bounded posteriorly with black; crest straight, erect, and of a deep black; occiput rusty red; feathers of the sides and back of the neck lanceolate in form and of a blue-grey, encircled all round with brown, and with a narrow line of the same colour down the centre; back, wings, rump and upper tail-coverts olive-grey; tertiaries edged with buff narrowly on their outer webs and broadly on their inner ones; tail grey; chest blue-grey; upper part of the abdomen buff; centre of the abdomen black; flank feathers rich chestnut, with a line of buffy white down the centre; lower part of the abdomen and under tail-coverts sandy buff, with a broad stripe of greyish brown down the centre of each of the latter; bill black; feet brown.

Total length, $9\frac{3}{4}$ inches; *bill*, $\frac{11}{16}$; *wing*, $4\frac{1}{2}$; *tail*, 4; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{2}$.

Lophortyx Gambelii, Nutt. Proc. Acad. Nat. Sci. Phil., vol. i. p. 260.
Callipepla Gambelii, Gamb. Journ. Acad. Nat. Sci. Phil., vol. i. p. 219, New Ser.
Callipepla venusta, Gould in Proc. of Zool. Soc., Part XIV. p. 70.

In my description of *Callipepla Californica* I have stated that it is second in beauty to no member of the group; but at that time I was unaware of the existence of the *C. Gambelii*, which may dispute the palm, and is indeed a still finer bird. As yet I have only seen two examples, one of which is in the Museum at Neufchâtel, the other in that of the Garden of Plants at Paris. As soon as these came under my observation, I hastened to make the existence of the species known by characterizing it in the "Proceedings of the Zoological Society," under the name of *venusta*, but soon after found that it had been previously named *Gambelii* by Nuttall after his friend Dr. Gambel, which appellation I have accordingly adopted, and sunk my own into a synonym. I have also great pleasure in giving the following extract from Dr. Gambel's account of the species:—

"This beautiful species I discovered on the eastern side of the Californian Range of mountains in 1841. They were numerous, in flocks of fifteen or twenty, running about in company with another species, which I thought new also; but the specimens I had procured, whilst engaged in skinning this, were devoured almost at my elbow by a couple of hungry ravens. Several spiral-podded species of *Prosopis*, with low spreading branches, afforded them excellent covert, and the seeds of bushy Malvas, Chenopodiums, and Artemisias, probably served them as food in that dreary region.

"Here, where one would suppose it to be impossible for any animal to subsist, they were seen running about in small flocks, occasionally uttering a low guttural call of recognition, sometimes of several notes very different from that of the common species. When flying they utter a loud sharp whistle, and conspicuously display the long crest."

It is very nearly allied to *C. Californica*, but is distinguished from that bird by the erect carriage of the crest, the rich colouring of the flank feathers, by the absence of the scale-like markings of the abdomen, and the greater length of the tail.

Habitat. California.

The figures are of the natural size, taken from an adult specimen kindly lent to me by M. Louis Coulon, Director of the Museum at Neufchâtel.



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

CALLIPEPLA ELEGANS.

C. Hullmandel Imp.

CALLIPEPLA ELEGANS.

Elegant Partridge.

SPECIFIC CHARACTER.

Call. cristâ saturatè fulvâ; gulâ nigro guttatâ; pectore et abdomine cinereis, hoc albido guttato; nuchâ, et plumis scapularibus ferrugineis.

Male.—Forehead grey, with a fine line of black down the stem; crest deep buff; back of the head striated with black and white; throat spotted with black on a white ground, so numerously that the former colour predominates; mantle, chest and abdomen dark grey; the feathers of the mantle with a spot of rich ferruginous red near the tip of each feather, and the abdomen ornamented with large spots of greyish white; centre of the flank-feathers rich ferruginous; back and upper tail-coverts olive-brown; wings brown; scapularies rich ferruginous at the extremity, and with a spot of white on either web; tertiaries rich ferruginous with a line of white, bounded interiorly with black on the inner web; tail deep grey; under tail-coverts brownish grey, margined with buff; bill black.

Female.—Crest brown, crossed with zigzag markings of a darker colour; general plumage brown; the under surface spotted with buffy white; the upper surface freckled with buff, brown and grey; tail grey, freckled with buff and brown; wings blotched with large patches of blackish brown; the secondaries, tertiaries and scapularies margined with buff.

Total length, 10 inches; *bill*, $\frac{5}{8}$; *wing*, $4\frac{1}{2}$; *tail*, $3\frac{1}{2}$; *tarsi*, $1\frac{3}{4}$; *middle toe* and *nail*, $1\frac{3}{8}$.

Ortyx elegans, Less. Cent. de Zool., p. 189. pl. 61.—Ib. Ill. de Zool., texte de pl. 52.
—— *spilogaster*, Vig. in Proc. of Zool. Soc., Part II. p. 4.

SPECIMENS of this elegant species arrived in England and France at nearly the same time, and were simultaneously described in the capitals of each country; in the former by Mr. Vigors under the name of *Ortyx spilogaster*, and in the latter by M. Lesson as *Ortyx elegans*, which name having a slight advantage in priority of publication is necessarily the one adopted.

M. Lesson states that we are indebted to Dr. Botta for its discovery, and that it is an inhabitant of that portion of Western America, the shores of which are bathed by the Pacific Ocean.

This species, as its name implies, has many claims to our notice, and is conspicuous for the general elegance of its appearance, the beauty of its crest, and the delicate style of its markings.

Specimens of both sexes formed part of the collection received from Mexico, referred to in my account of *Cyrtonyx Massena*, and are now in the possession of the Earl of Derby.

A fine male is also contained in the national collection at the British Museum.

Habitat, California and Mexico.

The Plate represents both sexes of the natural size.



CALLIPEPLA SQUAMATA.

Scaly Partridge.

Specific Character.

Call. cristâ plenâ, ad basim cinerescenti-fuscâ, ad apicem albâ; interscapulio, colli lateribus, et pectore cinereis, singulis plumis notâ triangulari in medio, et ad apicem lunulâ nigrâ.

Head and throat hoary, deepening into brown on the crest, the tip of which is white; mantle and chest delicate ash-grey, each feather with a crescent-shaped mark of black at the tip, and a triangular patch of brown in the centre; centre of the abdomen buff, crossed with bars of mingled chestnut and black; all the upper surface brownish grey; tertiaries margined on their inner webs with buff; tail brownish grey; flanks brownish grey, with a broad stripe of buffy white down the centre; under tail-coverts sandy, with a line of brown down the centre of each; bill black.

Total length, $9\frac{1}{2}$ inches; *bill*, $\frac{1}{2}$; *wing*, $4\frac{3}{4}$; *tail*, $3\frac{1}{2}$; *tarsi*, $1\frac{1}{4}$; *middle toe* and *nail*, $1\frac{1}{4}$.

Ortyx squamata, Vig. in Zool. Journ., vol. v. p. 275.—Less. Ill. de Zool., texte de pl. 52.
Callipepla strenua, Wagl. Isis 1832, p. 277.
——— *squamata*, G. R. Gray, List of Gen. of Birds, 2nd Edit., p. 80.

Many years have now elapsed since I first received this species from Mexico, where it is doubtless as plentiful as its near allies are known to be. In the absence of all information respecting its habits I can do no more than portray this rare bird in two different attitudes, trusting that the time is not far distant when we may hope to receive some account of its manners and economy.

The *Callipepla squamata*, although not so brilliantly marked as some other members of the genus, is nevertheless a very pretty species, and is rendered conspicuously different from them all by the lunated fasciæ which entirely surround the body, and by the shortness of its crest, which is moreover of a soft and hair-like character.

Judging from the fact, that wherever a species is not remarkable in its colouring, the male and female differ but little in outward appearance, I am of opinion that the plumage of the sexes of the present bird is very similar, and that the accompanying figures are representations of both; at the same time this point is uncertain.

Specimens of this species are very rare in collections; there are two or three in that of the Zoological Society of London, and those from which my figures were taken will hereafter form part of the fine series of birds in the British Museum.

Habitat, Mexico.

The figures are of the natural size.



DENDRORTYX MACROURUS.

Large-tailed Partridge.

Specific Character.

Dend. fronte et gulâ nigris ; lineâ albâ super, atque infra plumas auriculares.

Head crested, the feathers inclining backwards; forehead, throat, ear-coverts and crest black, the feathers of the latter with a spatulate spot of reddish brown at the extremity; two lines, one above and the other below the ear-coverts, white; upper part of the chest, back of the neck and mantle rich chestnut-red, the edges of the feathers being grey; all the upper surface, wings and tail olive-brown, assuming the form of transverse bars on the wings and tail; primaries uniform greyish brown; under surface grey, each feather with a line of chestnut down the centre, and indistinct markings of greyish white on the margins of the webs; under tail-coverts black edged with buff; bill, feet and orbits red.
Total length, 15½ inches; *bill*, ¾; *wings*, 6½; *tail*, 6½; *tarsi*, 2½; *middle toe* and *nail*, 2.

Ortyx macroura, Jard. and Selb. Ill. Orn., vol. i. pl. 49.—Nat. Lib. Orn., vol. iv. pl. 12.

This species, the largest of the family yet discovered, is a native of Mexico, and is so rare in the cabinets of this country, that the specimen in the collection of Sir William Jardine, Bart., is the only one I am acquainted with; it was purchased at the sale of Bullock's London Museum. Another example, which has been kindly lent me to figure from, is contained in the collection of Prince Massena at Paris; the colouring of these two specimens is precisely alike, and they appear to be adult males.

The late M. Natterer considered this bird to be identical with the *Tetrao nævius* of Gmelin; but upon comparing the above-mentioned specimens with his description, I find so great a disparity between them, that though he may be correct in this opinion, still, as the details given are vague and indefinite, I should deem it hazardous to adopt Gmelin's specific name. He states, for instance, that the *T. nævius* is twenty-one inches long, whereas the present bird does not exceed sixteen inches; and he mentions nothing respecting the black colouring of the head and throat; I have therefore retained for it Messrs. Jardine and Selby's appropriate appellation of *macrourus*.

Of the habits and economy of this species I regret to say nothing whatever is known.

Habitat, Mexico.

The Plate represents an adult male of the natural size.



DENDRORTYX LEUCOPHRYS. *Gould.*

DENDRORTYX LEUCOPHRYS, *Gould.*

White-eyebrowed Partridge.

Specific Character.

Dend. lineâ latâ superciliari a naribus, atque gulâ albis; corpore subtùs cinereo, lineâ centrali latâ castaneâ singulis plumis ornatis.

Face and a broad stripe over the eye buffy white; ear-coverts and crown of the head brown; feathers of the sides and back of the neck rich chestnut, margined on each side with white; feathers of the upper part of the back rich chestnut, margined with slate-grey; breast grey, with a stripe of reddish chestnut in the centre of each feather; back dark greyish brown, very minutely freckled with black; wings brown, freckled with buff and black; primaries deep rust-red; tail dark brown, freckled with buff and black; irides clear brown; feet red; bill black.

Total length, $13\frac{1}{2}$ inches; *bill*, $\frac{5}{8}$; *wing*, $7\frac{1}{2}$; *tail*, 6; *tarsi*, $2\frac{3}{8}$; *middle toe* and *nail*, $1\frac{7}{8}$.

Ortyx leucophrys, Gould in Proc. of Zool. Soc., Part XI. p. 132.

This fine species is a trifle smaller than *Dendrortyx macrourus*, from which it is distinguished by the conspicuous stripe of white which surmounts the eyes.

Three examples are all that have come under my notice; one of which is in the collection at the Jardin des Plantes at Paris, and the other two in the possession of the Earl of Derby; of the latter one is now living in his Lordship's aviary; the other, a mounted specimen, has been kindly lent me by his Lordship for illustration in the present monograph.

Habitat. The southern portion of Mexico. The specimen from which my figure was taken was received direct from Coban.

The Plate represents the bird of the natural size.



DENDRORTYX BARBATUS.

Published and H.C. Richards del. et lith.

Hollinsworth & Walton Imp.

DENDRORTYX BARBATUS.

Bearded Partridge.

Specific Character.

Dend. gulâ cinereâ ; pectore nitidè aurantiaco-fusco ; lateribus olivaceo-cinereis, singulis plumis lineâ centrali castaneâ, et guttâ marginali obliquâ albâ posticè nigro marginatâ ornatis.

Head slightly crested, the feathers of which are dark brown ; forehead brownish buff ; stripe above and behind the eye, throat and sides of the neck leaden grey ; mantle deep rich chestnut, each feather edged with grey ; upper surface mingled brown, black and buff, presenting a very sparkling appearance ; primaries reddish brown, mottled and freckled with dark brown ; tail dark chestnut-brown, the four central feathers strongly marked with black and buff, assuming the form of broad bars ; the outer feathers slightly freckled with black ; chest uniform bright orange-brown ; flanks olive-grey, with a chestnut mark down the centre, and with an oblique spot of white on the margin, bounded posteriorly with black ; under tail-coverts sandy brown, with a crescent-shaped mark of a lighter hue at the extremity ; bill, orbits and feet red.

Total length, 12½ inches ; *bill*, ¾ ; *wing*, 6½ ; *tail*, 4½ ; *tarsi*, 2⅛ ; *middle toe* and *nail*, 2.

Perdix barbatus, Licht. in Mus. Berlin.

For our first knowledge of the existence of this species we are indebted to the discrimination of Professor Lichtenstein of Berlin, in the Royal Museum of which city specimens are deposited. With a liberality only equalled by his kindness, M. Lichtenstein permitted me to bring this and other rare birds to London, for the purpose of figuring them in my Monograph.

The Bearded Partridge belongs to that section of the family of which the *Dendrortyx macrourus* is the type ; it equals that bird in size, and may be regarded as one of the finest of the *Odontophorinæ* ; it differs chiefly in having a shorter and more uniformly coloured crest, and in having a shorter and squarer tail ; its toes are also rather more lengthened and its claws straighter ; modifications of structure which evidently ally it to the members of the restricted genus *Odontophorus*.

Habitat. Jalappa in Mexico.

The figures are of the natural size.



ODONTOPHORUS GUIANENSIS:

J. Gould and H.C. Richter del. et lith. C. Hullmandel Imp.

ODONTOPHORUS GUIANENSIS.

Guiana Partridge.

Specific Character.

Od. corpore subtùs, a pectore ad caudam aurantio-fusco, vel arenaceo-rubro, griseo-fusco transversim fasciato.

Head decorated with a rather full occipital crest, the feathers of which are broad and incline downwards; the general plumage is mottled brown, buff and black; cheeks, crown of the head and crest deep rusty red, crossed by indistinct bars and freckles of buff; mantle and upper part of the chest washed with grey; scapularies and tertiaries very strongly marked with deep black; primaries deep brown, crossed on the outer webs with buff; rump deep fawn-colour, minutely spotted and freckled with black; under surface from the chest downwards orange-brown or sandy red, transversely barred with greyish brown; tail very short and of a dark brown, minutely freckled with buff; bill and feet blackish brown.

Total length, 10 inches; *bill*, $\frac{3}{4}$; *wing*, $5\frac{1}{2}$; *tail*, $2\frac{1}{2}$; *tarsi*, $1\frac{3}{4}$; *middle toe* and *nail*, $1\frac{3}{4}$.

Tetrao Guianensis, Gmel. Syst., vol. i. p. 767.

Perdix Guianensis, Lath. Ind. Orn., vol. ii. p. 650.—Bonnat. and Vieill. Ency. Méth. Orn., Part I. p. 216.

Perdix rufina, Spix, Av. Sp. Nov., tom. ii. p. 60. pl. 76^{b}.

Perdrix de la Guiane, Buff. Ois., tom. iv. pl. 513.

Guiana Partridge, Lath. Gen. Syn., vol. ii. p. 776.—Ib. Gen. Hist., vol. viii. p. 323.

Odontophorus rufus, Vieill. Gal. des Ois., tom. ii. p. 38. pl. 211.

———— *Guianensis*, G. R. Gray, List of Gen. of Birds, 2nd Edit. p. 80.

Tock'ro, of the Macusi, and *Duraquara*, of the Accawai and Arawaak Indians.

This species is very generally dispersed over Guiana, Cayenne and Surinam; it is also said to inhabit Trinidad. Mr. Schomburgk informs me that it frequents the forests, and never visits the savannahs or open country; that it is usually encountered either singly or in pairs, and never in coveys; that it runs very quickly and is a shy bird; that when flushed it takes to the branches of the trees; that the eggs are deposited upon the ground; and that they are eight or ten in number and of a greenish-white colour.

It utters two distinct kinds of note; one a rather loud whistling call, which is emitted in the morning and in the evening; the other a sound like *Tock'ro*, whence its Macusi name. Its flesh is white, tender and delicate; it is consequently always eaten by travellers whenever it can be procured, as well as by the natives, who having their attention arrested by its call imitate it, and by this means bring the bird within range of their gun or arrows.

Mr. Waterton, when speaking of this bird in his "Wanderings," says, "before the morning's dawn you hear a noise in the forests which sounds like '*duraquara*' often repeated. This is the Partridge, a little smaller and differing somewhat in colour from the English bird. It lives entirely in the forests; and probably the young brood very soon leave their parents, as you never flush more than two birds in the same place, and generally only one.

The sexes are very similar in the colour of the plumage and also in size.

Habitat, Guiana and Surinam.

The Plate represents a male, a female, and a brood of young birds of the natural size.



ODONTOPHORUS PACHYRHYNCHUS: *Tschudi.*

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

Hullmandel & Walton Imp.

ODONTOPHORUS PACHYRHYNCHUS, *Tschudi.*

Thick-billed Partridge.

Specific Character.

"*Odontophoro guyanensi similis, sed differt coloribus præcipue gastræi saturatioribus, abdomine fasciolis nigris et fuscis vario, pedibus validioribus, digitis longioribus et rostro multo altiore.*"—Tschudi.

General plumage mottled brown and black, which, extending to the abdomen, offers a marked difference from the colouring of *O. Guianensis*: cheeks strongly washed with ferruginous, and barred and freckled with brown; occipital crest-feathers alternately barred with black and rufous; chest, hind part of the neck and mantle washed with grey; bill black; feet lead-colour.

Total length, 11 inches; *bill*, $\frac{7}{8}$; *wing*, $5\frac{3}{4}$; *tail*, $2\frac{1}{2}$; *tarsi*, $1\frac{7}{8}$; *middle toe* and *nail*, $1\frac{3}{4}$.

Odontophorus pachyrhynchus, Tschudi, Fauna Peruana, p. 282.—Gray and Mitch. Gen. of Birds, vol. iii. p. 513, *Odontophorus*, sp. 9.

For the discovery of this species we are indebted to the researches of M. Tschudi, it being one of the novelties which rewarded his explorations of the interior of Peru, where he states it is to be met with in the districts ranging between four and seven thousand feet above the level of the sea. It possesses many characters in common with *O. Guianensis* and *O. marmoratus*, but is rendered conspicuously different from both by the great size and the thickness of its bill, whence the specific name.

Habitat. Peru.

The figures, which are a trifle less than the natural size, were taken from a specimen collected by M. Tschudi.



ODONTOPHORUS SPECIOSUS: *Tschudi*

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

Hullmandel & Walton Imp.

ODONTOPHORUS SPECIOSUS, *Tschudi.*

Rufous-breasted Partridge.

Specific Character.

"*O. pileo plumis elongatis obscure fuscis; regionibus superciliaribus nigro et albo maculatis; gulâ aterrimâ; dorso fusco, lineolis obscuris transversalibus numerosis; plumarum scapo albo; remigibus nigris; parapteris nigro et flavo maculatis; crisso et uropygio dorso dilutioribus; pectore abdomineque cinnamomeis.*"—Tschudi.

Crown of the head very dark brown; over the eye an interrupted line of white streaks; throat black; back brown with numerous transverse indistinct lines or freckles of black, and with a line of white down the centre; wings similarly marked, and with an oval spot of buff, bounded posteriorly with black at the tip of each of the coverts; primaries dark brown, freckled with deep sandy buff; scapularies black, broadly margined on their inner webs with deep buff; chest and abdomen cinnamon-red; rump and thighs brown, freckled with black; bill black; feet lead-colour.

Total length, $10\frac{1}{2}$ inches; *bill*, $\frac{7}{8}$; *wing*, $5\frac{1}{4}$; *tail*, $2\frac{1}{4}$; *tarsi*, 2; *middle toe* and *nail*, $2\frac{1}{8}$.

Odontophorus speciosus, Tschudi, in Wiegm. Archiv. Naturg. 1843, p. 387.—Ib. Fauna Peruana, p. 281. Taf. xxxiii.—Gray and Mitch. Gen. of Birds, vol. iii. p. 513, *Odontophorus*, sp. 8.

This species, like the *O. pachyrhynchus*, was discovered by the celebrated Peruvian traveller M. Tschudi, who has thus added two highly interesting species to this section of the family. It is distinguished from all the others by its richly coloured chest of cinnamon-red, with a throat mark of the deepest black; it is about the size of *O. Guianensis*, and like that bird dwells in the midst of the hottest forests; but even there, says M. Tschudi, it is seldom met with.

In a fine example from Peru, now in the possession of the Earl of Derby, the black of the throat extends over the eye, obliterating the white streaks above that organ, but leaving them very apparent posterior to it.

Habitat. The hot forests bordering the rivers Aynamayo and Chauchomayo in Peru.

The figures are of the natural size.

ODONTOPHORUS DENTATUS.



ODONTOPHORUS DENTATUS.

Capueira Partridge.

Specific Character.

Od. corpore subtùs fuscescenti-plumbeo ; crisso rufescenti-fusco, nigro guttato.

Crown of the head and crest reddish brown, finely freckled with darker brown; forehead and a line over the eye to the occiput rusty red; orbits less denuded than in *O. Guianensis* and of a red colour; scapularies and tertiaries very strongly marked with blotches of black, chestnut and greyish brown, with a longitudinal stripe of buffy white down the centre of each feather; primaries dark brown, crossed on their outer webs with a series of bands or spots of white; rump buff, freckled with brown, the centre of many of the feathers with a fine stripe of olive down the centre; tail dark brown freckled with buff; under surface uniform brownish lead-colour; under tail-coverts reddish brown spotted with black; bill dark brown; tarsi and feet deep lead-colour.

Total length, 11 inches; *bill*, $\frac{3}{4}$; *wing*, $5\frac{3}{4}$; *tail*, ?; *tarsi*, $1\frac{7}{8}$; *middle toe* and *nail*, $1\frac{7}{8}$.

Perdix dentata, Temm. Pig. et Gall., Part III. pp. 418 and 734.—Nieu Weid, Trav., vol. iv. p. 486, but not the synonyms.—Licht. Verz. der doub., p. 63.

L'Uru, Azara, Voy., tom. iv. p. 158.

Perdix Capueira, Spix, Av. Sp. Novæ, tom. ii. p. 59. tab. 76ª.

Ortyx capistratus, Jard. and Selb. Ill. Orn., vol. i. pl. 38.

Odontophorus Guianensis, G. R. Gray, List of Gen. of Birds, 2nd Edit., p. 80.—List of Birds in Brit. Mus. Coll., Part III. p. 43.

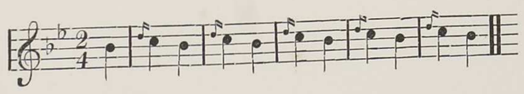
Capueira, Oriental Brazilians. *Hatarat*, Botocudo Indians.

The present species, which is very common in all museum collections, has been frequently confounded with the *O. Guianensis*, which is nearly allied to it, but which on comparison will be found to present many specific differences.

Its range extends over most parts of Brazil from the River Plate to the Amazon; some localities being of course more especially adapted to its habits than others.

An interesting account of this bird having been kindly sent me by His Highness Maximilian Prince of Weid, I here transcribe it nearly in his own words. "This bird is called *Capueira* by the Brazilians. Its habits and mode of life are very similar to those of the Hazel Grouse or Gelinotte (*Bonasa sylvestris*). It never frequents the open country, but confines itself entirely to the thick woods. In the early part of the year the *Capueira* lives in pairs, and after the breeding-season the families remain in coveys of from ten to sixteen or more in number. They run very quickly, and procure their food among the dry leaves on the ground in the midst of the extensive woods; the stomachs of those I examined contained fruits, berries, insects, small stones and a little sand. The part of the country in which I met with this bird is the eastern portion of southern Brazil, from Rio de Janeiro to the thirteenth degree of south latitude; by Spix it appears to have been found still farther north. In the vast forests bordering the rivers Mucuri, Alcobaca, Belmonte and Ilheo's the Capueira was very common, and we frequently killed them for the sake of their flesh, which is excellent. Its loud and remarkable voice is only heard in the forests, where it reverberates to a great distance. Azara states that the cry is uttered by both sexes, but I believe it is emitted by the male bird only. Like the Domestic Cock in Europe it frequently aroused us at break of day, bidding us as it were to continue our researches among the grand but almost impenetrable forests of that magnificent country. It commenced calling before daybreak, thus affording us ample time for breakfasting, and enabling us to start by the dawn of the young day.

"Azara tells us that the voice of the Capueira consists of two notes; but on this point he is incorrect, as it comprises three or four notes which are frequently and very quickly repeated, and which may be thus explained :—



"During the morning and evening twilight the Capueiras perch on a branch in a line very near to each other, and at this time the male birds frequently give utterance to their cry, which Azara states to resemble

the word '*uru*,' but it appeared to me to be very different. The nest found by me in the woods near the fine lake called Lagoa d' Arara (Macaw Lake) was placed on the ground, and contained from ten to fifteen pure white eggs, which coincides with Sonnini's account; while Azara's assertion that they are of a violet-blue is doubtless a mistake, which may probably have arisen, as M. Temminck suggests, from his having mistaken the eggs of a Tinamou for those of a Capueira. Some travellers have asserted that they have found the nests of this bird on trees, and that they were placed in such situations in order that they might be secure from the attack of snakes and other enemies; but this also is a mistake; for were such a precaution necessary, it would be adopted by all the birds of the country, whereas numerous species, for instance all the Tinamous, constantly breed on the ground. The sport afforded by the Capueira very closely resembles that afforded by the Hazel Grouse: when a covey was disturbed by the pointers they flew to the trees, the motion of their wings causing the same rustling sound as those of the Partridge; occasionally they might be killed very easily, at other times it was very difficult to sight them among the dense foliage of the woods: the pectoral muscles, like those of the other members of the family, are very fully developed, and the flesh, which is very palatable, forms an excellent article for the table."

The sexes, as is usually the case with the members of this genus, differ but little in colour; the female is however not so strongly marked and is somewhat smaller than the male.

Habitat. Brazil.

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



ODONTOPHORUS STELLATUS, *Gould.*

Starred Partridge.

Specific Character.

Od. pectore, abdomine crissoque splendidè rufescenti-castaneis; pectoris plumis lateralibus guttâ centrali albâ annulo nigro angusto circumdatâ stellatis.

Male.—Naked skin before and behind the eye yellowish; bill black; crest rather lengthened and full; forehead and ear-coverts clouded chestnut, the former passing into reddish chestnut on the crown, and gradually brightening towards the occiput; throat and neck both before and behind grey, all the feathers margined with rufous; scapularies and wings (except the primaries) beautifully marked with rich chestnut, buff and black, the black predominating on the scapularies, which feathers are rendered very conspicuous by having a whitish buff line down the centre; the tertiaries also are marked with a bold edging of rich buff, bounded on the inner side by a well-defined band of black, which surrounds the feather, while the buff occupies the upper edge only; at the tip of all the wing-coverts is a triangular spot of buffy white; primaries blackish brown, marked on their outer edge with indistinct but regular bars of reddish brown; back and rump dull greyish buff, each feather minutely dotted and freckled with brown and black; tail-coverts and tail rufous brown and black, the markings and colour so disposed that neither predominate, being dispersed over each feather in alternate narrow zigzag lines, interspersed with minute dots and freckles; chest, abdomen and under tail-coverts rich rufous chestnut; the feathers of the chest with a small white mark in the centre, very nearly surrounded by a narrow irregular line of black, giving it a very sparkling appearance; feet and legs in the dried specimen horn-colour.

Female.—Differs in being smaller in size and in having the white markings of the chest more lengthened in form and less conspicuous than in the male; in all other respects the colouring of the two sexes is very similar.

Male.—Total length, $10\frac{1}{2}$ inches; *bill*, $\frac{3}{4}$; *wing*, $5\frac{3}{8}$; *tail*, $3\frac{1}{4}$; *tarsi*, 2.

Female.—Total length, $9\frac{1}{2}$ inches; *bill*, $\frac{5}{8}$; *wing*, $5\frac{1}{4}$; *tail*, $2\frac{1}{2}$; *tarsi*, $1\frac{3}{4}$.

Ortyx (*Odontophorus*) *stellatus*, Gould in Proc. of Zool. Soc., Part X. p. 183.

Ortyx leucostictos, Natt. MSS.

Odontophorus stellatus, List of Birds in Brit. Mus. Coll., Part III. p. 43.

This species fully equals in size the *O. dentatus*; it also inhabits the same country—Brazil; but from its extreme rarity in our collections, it must reside in the more remote and less frequently visited districts of that fine country. Specimens are contained in our own national collection, and in the Imperial Museum at Vienna.

In form it is very nearly allied to *O. dentatus* and *O. Guianensis*, but is readily distinguished from both of those species by the rufous tint of the breast and by the feathers of that part having a spangle of white near the centre of each; it has also a fuller and rounder crest than either of those species.

Habitat. M. Natterer states that it inhabits the borders of the River Madeira in Brazil.

The figures are of the natural size.



DIDACTOLOPHUS GETTARDII. Gould

ODONTOPHORUS GUTTATUS, *Gould.*

Guttated Partridge.

Specific Character.

Od. gulâ nigrâ, lineâ centrali albâ per plumas singulas ductâ ; pectore et corpore subtùs spadiceo-fusco, spathâ albâ singulis plumis apicem versus guttatis.

Male.—Crown of the head and upper feathers of the crest blackish brown ; under crest-feathers rich deep buff ; over the eye extending to the occiput a broad band of pale brown, each feather tipped with black ; beneath the eye, the ear-coverts and sides of the neck rich chestnut ; throat jet-black, with a line of white down the centre and assuming a triangular form near the tip of each feather ; back reddish brown freckled with black, each feather with a large patch of deep brown near the tip of the inner web, and with a line of buff down the centre ; wing-feathers alternately banded with buff and deep brown, the former sprinkled with black ; rump pale yellowish brown, obscurely spotted with black ; tail yellowish brown, banded with black ; breast and under surface chocolate-brown, with a pear-shaped spot of white, more or less encircled with black near the tip of each feather ; bill black ; feet lead-colour.

Female.—Differs in having the crest of a uniform brown, and in the black of the throat being less extensive.

Total length, 10 inches ; *bill*, $\frac{3}{4}$; *wing*, $5\frac{3}{4}$; *tail*, 3 ; *tarsi*, $1\frac{5}{8}$.

Ortyx guttata, Gould in Proc. of Zool. Soc., Part V. p. 79.
Odontophorus guttatus, List of Birds in Brit. Mus. Coll., Part III. p. 43.

Several years have now elapsed since I described this fine bird in the "Proceedings of the Zoological Society" from examples then living in their menagerie, all of which being females, I was not aware until lately that the male is distinguished from his mate by a beautiful tuft of orange-coloured feathers at the occiput ; in other respects the sexes are nearly alike in plumage. That this interesting species would readily become domesticated, is proved by the fact of an example belonging to the Earl of Derby having laid its eggs and reared its young in his Lordship's magnificent aviary at Knowsley.

The native country of the *O. guttatus* is Honduras, where, according to Mr. Dyson, it inhabits the Cahoon palm ridges ; a specimen this gentleman had alive for some time was procured on the Reondo River, on the borders of Yucatan.

The habits of those living examples that have come under my notice presented no peculiarity worth noting ; like the rest of the genus, they readily perched not only on the trees, but also on any ledge or projection of the aviary in which they were confined. They presented the same plump form as the Common Partridge and the *Ortyx Virginianus*.

Specimens now form part of the collection at the British Museum, and of that belonging to the Zoological Society of London.

Habitat. Honduras.

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



J. Gould and W. C. Richter del. et lith.

ODONTOPHORUS BALLIVIANI: *Gould*

Hullmandel & Walton imp.

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ODONTOPHORUS BALLIVIANI, *Gould.*

Ballivian's Partridge.

Specific Character.

Od. capite cristâque ferrugineo-rufis; infra et pone oculum latâ aterrimâ maculâ, supra et subter lineâ rubro-cervinâ marginatâ; corpore inferiore, castaneo-fusco, nigro minutissimè maculato; plumis singulis maculâ albâ ornatis.

Head and crest rich rusty red; beneath and behind the eye a broad patch of deep black, bounded above and below by a stripe of reddish buff; upper surface olive, minutely freckled with black; the feathers of the centre of the back and scapularies with a fine line of buffy white down the apical half of the stem, with a small double spot of black on their inner, and a large patch of black, bounded above and below with rusty red, on their outer webs; primaries and secondaries brown, crossed with irregular bands of rusty red, freckled with black; under surface dark chestnut-brown or coffee-colour, minutely freckled with black, each feather with an irregularly-shaped patch of white, bordered with black near the centre, giving the whole of the under surface a singularly rich and sparkling appearance; bill black; feet lead-colour.

Total length, 12 inches; *bill*, 1; *wing*, $6\frac{1}{4}$; *tail*, $2\frac{3}{4}$; *tarsi*, 2; *middle toe* and *nail*, $2\frac{1}{4}$.

Odontophorus Balliviani, Gould in Proc. of Zool. Soc., Part XIV. p. 69.

For our knowledge of this remarkably fine species we are indebted to the researches of Mr. Bridges in Bolivia. To no one member of the genus to which it belongs, need it yield the palm in size, or in the beauty and colour of its markings. At the request of Mr. Bridges, I have named it *Balliviani* in honour of General Ballivian, President of the Republic of Bolivia, who afforded him every facility in his power for the prosecution of his researches, and whose love of science renders him worthy of such a compliment.

Habitat. The forests of Cocapata in the Department of Cochabamba, in Bolivia.

The figures are of the size of life, from specimens procured by Mr. Bridges.

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ODONTOPHORUS COLUMBIANUS, *Gould.*

Caraccas Partridge.

Specific Character.

Od. vertice fusco, delicatulè nigro adsperso; nuchâ rufo marmoratâ; strigâ superciliari inconspicuâ; gulâ albâ irregularitèr nigro guttatâ præcipuè apud marginem; corpore subtùs rufescenti-fusco, plumis singulis notâ albâ nigro circumdatâ prope apicem ornatis.

Crown of the head brown, minutely freckled with black; back of the neck washed with rufous; over each eye an indistinct mottled stripe; throat white, irregularly spotted, especially on the sides, with black; upper surface brown, washed with grey on the centre of the feathers, each of which is delicately penciled with black, and has a narrow stripe of buff bounded on each side by a narrower one of black down the centre; those of the scapularies and wing-coverts have moreover a large patch of rich dark brown on the inner web near the tip, bounded above by two narrow lines, one of buff, the other of dark brown; primaries brown; secondaries brown, freckled and barred with dark brown, and washed with rufous; tertiaries brown, washed with grey and rufous, freckled with black, having a broad V-shaped mark of black near the tip, and broadly margined and tipped internally with deep buff; under surface reddish brown, each feather with a large irregularly-shaped mark of white margined with black near the tip; under tail-coverts and vent mottled reddish brown and sandy buff; bill black; feet lead-colour.

Total length, 11 inches; *bill*, 1; *wing*, $5\frac{3}{4}$; *tail*, $2\frac{3}{4}$; *tarsi*, 2; *middle toe* and *nail*, $2\frac{1}{4}$.

Odontophorus Columbianus, Gould in Proc. of Zool. Soc., May 14, 1850.

This fine bird has a stouter bill, and is of a larger size than *O. dentatus*, but is smaller than *O. Balliviani*, to which it is nearly allied.

A fine specimen graces the Museum at Leyden, to which it was transmitted by M. Landsberger, Netherlands Consul at Caraccas: another example from, I believe, the same locality, differs in having the under surface of a nearly uniform greyish brown, with here and there a few only of the white marks so conspicuous in the bird above described; it is also of a somewhat smaller size, but notwithstanding these differences, the two birds appear to be one and the same species.

Habitat. Caraccas.

The figures are of the natural size.



DDONTOPHORUS STROPHIUM: *Gould.*

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

Yale
1961

ODONTOPHORUS STROPHIUM, *Gould.*

Gorgeted Partridge.

Specific Character.

Od. mento albo; gulâ nigerrimâ, lunulâ albâ transversâ, notatâ; primarum pogoniis externis guttis carentibus.

Head slightly crested; crown, crest, and ear-coverts blackish brown; sides of the face dull white, speckled with black; chin white; throat deep black, crossed by a broad crescent-shaped mark of pure white; all the upper surface dark brown, freckled and marked with sandy buff; each of the scapularies with a large patch of black near the tip of the inner web, and a stripe of buff down the centre; all the wing-coverts with a spot of white at the tip; primaries and spurious wing dark brown, without the usual markings on the outer web; breast and under surface rich reddish chestnut, with a large spot of white in the centre of each feather; vent and under tail-coverts deep brown, tinged with buff; bill and feet blackish brown.

Total length, 9 inches; *bill*, 1; *wing*, 5½; *tail*, 2; *tarsi*, 2; *middle toe* and *nail*, 2.

Ortyx (*Odontophorus*) *strophium*, Gould in Proc. of Zool. Soc., Part X. p. 134.

I proposed the specific term *strophium* for this new species, as indicative of the peculiar form of the white mark on the throat. The only specimen I have seen is the one I at present possess, but which will hereafter be deposited in the British Museum. It appears to be an adult male, and in form is very robust; particularly in the legs and thighs, which, with the diminutive size of the tail, give it a somewhat *outré* appearance.

Habitat, the Spanish Main.

The Plate represents the bird in two positions, of the natural size.



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

ODONTOPHORUS LINEOLATUS.

Hullmandel & Walton Imp.

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ODONTOPHORUS LINEOLATUS.

Striped-breasted Partridge.

Specific Character.

Od. corpore subtùs pallidè cervino-fusco, sive pallidè ferruginoso, plumis singulis lineâ albâ centrali impressis.

Crown of the head and crest dark brown, becoming of a paler hue down the shafts of the feathers; at the back of the neck a patch of dark brownish black, blotched on either side with buff; middle of the back brown, finely freckled with dark brown, and with pale brown centres to each feather; wing-coverts mottled brown and buff, the latter predominating on the outer web and with a line of buff down the shaft; primaries and secondaries brown, mottled with buff on their outer webs; tertiaries rich chestnut-brown and black, with a small triangular spot of buff at their tips, and a broad conspicuous mark of buff on the margins of their inner webs; lower part of the back and upper tail-coverts brownish buff, crossed with broken bands of dark blackish brown; scapularies dark brown on their inner webs, buffy white freckled with black on the outer webs, and with a stripe of buff down the centre; tail dark brown, freckled with buff; chin white; face and throat grey, bounded by a narrow line of black, produced by the outer row of feathers being tipped with that colour; under surface sandy red, fading into white on the vent, each feather with a lighter stripe down the centre, under tail-coverts buff with black centres.

Total length, 8 inches; *bill*, $\frac{3}{4}$; *wing*, 5; *tail*, 2; *tarsi*, $1\frac{3}{8}$; *middle toe* and *nail*, $1\frac{1}{2}$.

Perdix lineolata, Licht. in Mus. Berlin.

Ortyx lineolatus, Natt. MSS.

—— *thoracicus*, Gamb. Proc. of Acad. Phil. 1847, t. 77.

Odontophorus lineolatus, Gray and Mitch. Gen. of Birds, vol. iii. p. 513, *Odontophorus*, sp. 7.

Eight years ago—February 22, 1843—the following note respecting this species was sent to me by my valued friend the late Mr. John Natterer of Vienna:—"Of this bird I saw two specimens in the Museum of Berlin, under the name of *Perdix lineolata*, Licht. Unfortunately I took no description, as it was very cold in the Museum towards the end of November 1838, the time of my visit there: I merely noted, 'two curious birds with large feet and long toes; differing so much in colour that they might be considered as two species.' I have no doubt M. Lichtenstein will lend you these birds, and any others you may want for your Monograph." Shortly after the receipt of the above, and many other useful notes from the same kind friend, I paid a visit to Berlin and examined the birds in question, and was permitted to bring them to London and make drawings of them: one strictly accords with the description given above; the other differs in having the throat and broad stripe over the eye and down the side of the neck rufous, and the under surface greyish brown. I have no doubt that they are the opposite sexes of the same species, and as such I have figured them.

Unaware, I presume, that this species had been previously named by M. Lichtenstein, Dr. Gambel of Philadelphia has lately assigned to it the specific appellation of *thoracicus*, which I am sure he will readily resign in favour of the prior name of *lineolatus*.

Habitat. The specimens at Berlin and at Philadelphia are all from Mexico, which we may hence infer is the true habitat of the species.

The figures are of the natural size.

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Cat. 10-21-54
Dismissed & collated
OK - Dec 19, 1961
R.M.H.

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GOULD'S
PARTRIDGES
OF
AMERICA.