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## NATURAL HISTORY

T O

## BIRDS.

### The CANARY FINCH\*.

Le Serin des Canaries, Buff. Fringilla Canaria, Linn. Serinus Canarius, Briff. Ray, Will. and Kolb. Passer di Canaria, Zinn. Canarien Vogel, Wirs.

I F the Nightingale be the fongster of the grove, the Canary Finch is the musician of the chamber. The melody of the former is derived from Nature alone, that of the latter is directed and improved by our instructions: With a weaker voice, with less extent of modulation, with less variety of notes, the Canary Finch has a finer ear, greater facility of imitation †, and a more

The Linnean character:—"The bill and body yellowish-white, the feathers of the wings and tail greenish, the bill whitish." It is four inches and a half long.

<sup>†</sup> The Canary learns to speak, and articulate many little names very distinctly... By means of a slageolet, it can acquire two or .vol. iv.

a more retentive memory; and, as the characters of animals depend principally on the quality of their perceptions, this delicate bird, alive to every impression, becomes also more social, more gentle; forms acquaintance, and even shews attachment\*. Its caresses are amiable, its little pets are innocent, and its anger neither hurts nor offends. Its habits too approach nearer to our own; it feeds on 'grain, like the other domestic birds; it is more easily bred than the Nightingale, which lives only on flesh and infects, and which requires its meals to be purposely prepared. Its education is attended also with greater success; it readily lays aside the melody of its native airs to adopt the harmony of our voices and instruments; it eagerly follows the notes, and improves and heightens their delicacy. The Nightingale, proud of its independent warble, feems defirous to preserve its purity; at least, he slights our music, and can hardly be brought to learn a few fongs. The Canary Finch prattles or whiftles; but the Nightingale despises what he deems the perversion of his talents, and perpetually recurs to the rich beauties of Nature.

three airs, which it chants in their proper tone, always keeping due time, &c. Traité des Serius des Canaries, par Hérvieux, 1713.—A Canary, which, when young, was placed very near my desk, got an odd sort of song; it imitated the sound made by telling crowns.

Note communicated by Hebert, receiver general at Dijon.

It becomes so familiar and so tond of caressing, that a thousand and a thousand times it comes to kiss and bill its master, and never fails to answer his call. Fraite des Serins, par M. Hervieux.

His ever-varied fong can never be altered by man; that of the Canary Finch is more pliant, and can be modelled by our taste. The one therefore contributes more than the other to the comforts of society; the Canary Finch sings at all times, recreates our spirits in the gloomiest weather, and even adds to our happiness; it amuses all young people, and is the delight of the recluse; it relieves the languors of the cloister, and insuses cheerfulness into innocent and captive minds; and its little loves, which are manifest when it breeds, have a thousand and a thousand times awakened the tenderness of feeling hearts. It is as useful, as the Vulture is pernicious.

To the happy climate of the Hesperides, this charming bird owes it birth, or, at least, its perfection: for, in Italy\*, there is a species smaller than that of the Canaries, and in Provence, another almost as large †; but both these are

<sup>\*</sup> Citrinilla, Gesner; Vercellino, Olina.—" Sparrow variegated above with yellowish green; below dilute greenish; the wing and tail quills blackish, the outer margin greenish." The Italian Serin. Brisson. It is the Fringilla Citrinella of Linnæus, and the Citril Finch of Latham. Its specific character:—" It is somewhat greenish, its back spotted with dusky, its legs shesh co-

<sup>\*</sup> Serinus, Serin, Cenicle, Cerefin, Cinit, Cedrin.— Sparrow varying above with greenish yellow, below dilute greenish, the fides marked with dusky longitudinal spots, a greenish yellow fripe on the wings; the quills of the wings and of the tail dusky above, the outer margins grayish-green, the tips whitish. The Serin. Brisson. It is the Fringilla Serinus of Linnaus, and the Serin Finch of Latham. Its specific character:— It is somewhat greenish,

more rustic, and may be regarded as the wild branches of a polished stem. All the three intermix in the state of captivity; but in the range of nature, each propagates in its peculiar climate. They are therefore permanent varieties, and ought to be distinguished by separate names. The largest was called *Cinit*, or *Cini*, in the time of Belon (above two centuries ago); and in Provence it is termed at present *Cini*, or *Cigni*, and the Italian kind *Venturon*. I shall distinguish these three varieties by the epithets *Canary*, *Cini*, and *Venturon*.

The Venturon, or the Italian Bird, is found not only through the whole of Italy, but in Greece \*, Turkey, Austria, Provence, Languedoc, Catalonia, and probably in all climates of that temperature. Some years, however, it is very rare in the southern provinces of France, and particularly at Marseilles. Its song is pleasant and varied. The semale is inferior to the male both in the charms of its notes and in the beauty of its plumage. The shape, the colour, the voice, and the food of the Venturon and of the Canary, are nearly the same; and the only difference is,

greenish, its lower mandible whitish, its back and sides spotted with dusky; a yellow spot on the wings."

<sup>\*</sup> The ancient Greeks called this bird Teaumi; and the modern Greeks, according to Belon, Emission. The Turkish name is Sare: in some parts of Italy it is termed Luguarinera, Beagana, Revivini; in the neighbourhood of Rome, Verzellino; in Bologna, Vidarino; at Naples, Lequilla; at Genoa, Scarino; in the Trentin, Citrinella; in Germany, Citrynle or Zitrynle; at Vienna, Citril.

that the Italian bird is fenfibly smaller, and its warble neither so clear nor so melodious.

The Cini, or Green Bird of Provence, is larger than the Venturon, and its tones are much fuller. It is distinguished by the beauty of its colours, the loudness of its song, and the variety of its notes. The female, which is rather larger than the male, and has sewer yellow feathers, chants not like its mate, and answers only in monosyllables. It seeds on the smallest seeds it can find in the field; lives long in a cage, seems fond of lodging with a gold-finch, whose accents it seems attentively to hear, and adopt, to vary its own warble. It occurs not only in Provence, but also in Dauphiné, in the Lyonnois\*, in Bugey, in Geneva, in Switzer-land, in Germany, in Italy, and in Spain †. It

This is not altogether accurate; for the fong of these German Serins, which are the same with those of Switzerland and Provence, though full and shrill, is far from having the sweetness and mellowness of the Canary Birds.

<sup>\*</sup> I have feen in the country in Bugey, and near Lyons, birds very like the Canary Finches, and they were called Signis or Cignis. I have also feen them at Geneva in cages, and their song did not seem to me very pleasant.—I think they are called at Paris the Swiss Serins." Note of M. HEBERT.

<sup>&</sup>quot;The German Serins are much commended; they excel the Canary Finches by their beauty and their fong. They are not inclined to grow fat; the force and extent of their warble prevent, it is faid, that effect. They are raised in cages or in chambers fitted up for them, and having an easterly aspect; they hatch thrice a-year, from the month of April to August." Le Parfait Osfeleur.

<sup>†</sup> In Catalonia, it is called Canari de Montanya; in Italy, Scrin, or Scarzerin; in Germany, Fædeule; in the neighbourhood of Vicana, Hirn-gryll; in Switzerland, Schwederle.

is the same bird that is called in Burgundy the Serin; it builds among the ofiers planted along the sides of the rivers, and its nest is lined with hair, and cased with moss. This bird, which is pretty common in the vicinity of Marseilles, and in the south of France as high as Burgundy, is unfrequent in the northern provinces. Lottinger says it is only migratory in Lorraine.

The prevailing colour of the Venturon as well as that of the Cini, is a green yellow on the upper part of the body, and a yellow green on the belly; but the Cini, larger than the Venturon, is distinguished by the brown colour which appears in longitudinal spots on the sides of the body, and in waves below \*; whereas in our

<sup>\*</sup> I shall here insert an excellent description of the Cini, which M. Hebert sent to me. "This bird is somewhat smaller than the Canary Finch, which it much resembles. It has precisely the same plumage with a kind of Canary called the Gray Canary, which is perhaps the original bird, and the varieties are owing to domestication.

<sup>&</sup>quot;The fore-part of the head, the orbits of the eyes, the underpart of the head, a fort of collar, the breast and belly as far as the toes, are of a jonquil-colour, with a tinge of green. The sides of the head, and the higher part of the wings, are mixed with green, jonquil, and black. The back, and the rest of the wings, are dashed with green, gray, and black. The rump is jonquil. The breast, though of a single colour, is waved. The spots scattered on the plumage of the Cini are not distinctly marked, but run into each other; those on the head are much finer, and like points; on the two sides of the breast, and under the belly parallel to the wings; are spots or streaks of black.

<sup>&</sup>quot;The tail is forked, confifting of twelve quills; the wings are of the fame colour with the back; the ends of the coverts at the origin of the great quills, are flightly edged with a fort of dull yellow i

our climate, the common colour of the Canary is uniform, and of a citron-yellow on all the body, and even on the belly: it is only the tips of the feathers however that are tinged with that delicate hue, the rest of them being entirely white. The female is of a paler yellow than the male; but this citron-colour verging more or less on white, which the Canary assumes in our climate, is not the tint of its native climate, for it varies according to the different temperatures. "I have observed," says one of our most intelligent naturalists, "that the Canary Finch, " which becomes entirely white in France, is in "Teneriffe of almost as deep a gray as the lin-" net; this change of colour is owing probably "to the coldness of our climate." The colour can be varied also by the difference of food, by confinement, and above all by the mixture of

low; the great quills and the tail are similar, and of a brown verging to black, with a slight edging of gray; the tail is shorter than that of the Canary bird.

"In general this bird is jonquil below, and variegated on the back with different colours, in which the green predominates, though we cannot affert that this is the ground colour; on the back not a fingle feather but is variegated with feveral colours.

"The bill is pretty much like that of the Canary, but rather thorter and smaller; the upper mandible is level with the crown of the head, has little concavity, broader at its base, and scalloped near its origin; the lower mandible is more concave, placed diagonally under the upper, into which it is encased.

This Cini was only two inches and seven lines from the top of the head to the origin of the tail, which was only one inch and ten lines; the wings extend to the third of the tail; the legs are very flender; the tarsus six lines long, and the toes near as much; the nails are not regularly hooked.

breeds.

breeds. In the beginning of this century the curious in birds reckoned already twenty-nine varieties of Canaries, and all of them were distinctly described \*. The primitive stock from which these were descended is the Common Gray Canary. All those which have other uniform colours derive them from the difference of climates. Those which have red eyes are more or less inclined to a pure white plumage; and the variegated are rather artificial than natural †.

But,

- \* I shall here enumerate them all, beginning with those which are most common :-
- I. The Common Gray Canary.
- 2. The Gray Canary, with down and white feet. Variegated breed.
- 3. The White-tailed Canary. Variegated breed. .
- 4. The Common Blaxen Canary.
- 5. The Flaxen Canary, with red eyes.
- 6. The Golden Flaxen Canary.
- 7. The Fiaxen Canary, with down.
  Variegated breed.
- 8. The White-tailed Flaxen Canary.

  Variegated breed.
- 9. The Common Yellow Canary.
- 10. The Yellow Canary, with down.
  Variegated breed.
- 11. The White-tailed Yellow Canary.

  Variegated breed.
- 12. The Common Agate Canary.
- 13. The Agate Canary, with red eyes.
- 14. The White-tailed Agate Canary.

  Variegated breed.
- 15. The Agate Canary, with down.

  Variegated breed.

- 16. The Common Pink Canary.
- 17. The Pink Canary, with red cyes.
- 18. The Golden Pink Canary.
- 19. The Pink Canary, with down.

  Variegated breed.
- 20. The White Canary, with red eyes,
- 21. The Common Variegated Canary.
- 22. The Variegated Canary, with red
- 23. The Flaxen Variegated Canary,
- 24. The Flaxen Variegated Canary, with red eyes.
- 25. The Black Variegated Canary.
- 26. The Jonquil-black Variegated Cannary, with red eyes.
- 27. The Jonquil-black Variegated Canary, of a regular pluroage.
- 28. The Full Canary, (that is entirely of a jonquil-yellow,) which is the rarest.
- 29. The Crest Canary, (or rather the Crowned,) which is one of the most beautiful.

Traité des Serins de Canaries, par Hervieux, 713.

+ "The shades and arrangement of the colours of the Variegated Canaries differ exceedingly; some are black on the head,
others not; some are spotted irregularly, and others with great regularity. The differences of colour are commonly perceived only
on the upper part of the bird; they consist of two large black spots

But, besides these primary varieties, which feem to have been introduced by the change of climate, and some secondary ones that have fince appeared, there are others more apparent, and which result from the union of the Canary with the Venturon, and with the Cini; for not only do these three birds breed together, but the young hybrids are capable of procreation. The fame may be faid in regard to the fruits of the commerce of the Canary with the Siskin, with the Goldfinch, with the Linnet, with the Yellowhammer, with the Chaffinch, and even it is faid with the Sparrow \*. These birds, though very different from each other, and apparently discriminated widely from the Canaries, can by proper care and attention be made to pair with The Canary must be removed from those of its own species; and the experiment feems to fucceed better when performed with the female than with the male. The Sifkin and Goldfinch are the only birds with which, it is

on each wing, the one before and the other behind, in a large crefcent of the same colour placed on the back, pointing its concavity towards the head, and joining by its horns to the two anterior black spots of the wings. Lastly, the tail is surrounded behind by an half-collar of gray, which seems to be a compound colour resulting from the intimate mixture of black and yellow. The tail and its coverts are almost white." Description des Couleurs d'un Canari Panaché, observé avec M. de Montbelllard.

<sup>\*</sup> D'Arnault affured Salerne that he saw at Orleans a gray-hen Canary which had escaped from the volery, couple with a sparrow, and make her hatch in a sparrow-can, which thrived. Amusemens Innocens, ou le Parsait Oiseleur, 1774.

well ascertained, that the male Canary can propagate. On this subject one of my friends thus writes me; a person of as much experience as veracity\*.

" For thirty years past I have raised many of these small birds, and have paid particular attention to breeding them; I can therefore from long observation affert the following facts. When we wish to pair Canaries with Goldfinches, we must take the Goldfinches at ten or twelve days old. and put them in the nest with Canaries of the fame age; we must raise them together in the same volery, and accustom them to the same food. It is usual to lodge the male Goldfinches with the female Canaries, and they affociate much more readily than if the female Gold-'finches were joined with the male Canaries. We may observe however, that the union is more tardy; because the Goldfinch is later in . pairing than the Canary; on the contrary, if the female Goldfinch be placed beside the male Canary they sooner couple †. To succeed we must never admit the male Canary into the voleries where there are female Canaries, for he would then prefer them to Goldfinches ‡."

Y W. Father Bougot.

<sup>+</sup> This proves (as we shall afterwards observe) that the semale is not so much stimulated to love by nature, as roused by the solicitation of the male.

T Gelner says, that a Swiss bird-catcher trying to pair a cock Canary with a hen Sarzerine, (Cini,) had eggs, but that these were addle.

" With regard to the union of the male Canary with the female Siskin, I am certain that it fucceeds well. I have kept for nine years in my volery a female Siskin, which never failed to make three hatches annually for the first five years, though the number was reduced to two in the four following years. I have other Sifkins which have bred with the Canaries, without being raifed or kept separately. We need only leave the male or female Siskin in the chamber with a good number of Canaries, and we shall perceive them pair with the Canaries, at the same time that these pair with each other; whereas, to succeed with the Goldfinches, they must be shut up in a cage with the Canary, and every bird of the same species must be excluded. The Siskin lives as long as the Canary, and eats the same food with much less reluctance than the Goldfinch.

"I have also put Linnets with Canaries; but there is seldom success, unless we lodge the male Linnet with the semale Canary; for the hen Linnet makes no nest, but drops her eggs in the cage, and these are generally addle. I have made the experiment with them, having placed them under semale Canaries, and frequently found that they did not hatch.

"It is very difficult to pair Chaffinches and Yellow-hammers with Canaries. I have kept for three years a female Yellow-hammer with a male Canary, and it has laid only addle

eggs. This has also been the case with the female Chaffinch; but when the female Canary is covered by the male Chaffinch and Yellow-hammer she has prolific eggs."

From these facts, and some others which I have collected, it appears that the Siskin is the only bird of which the male and female propagate equally with those of the male or female. . Canaries. The female Canary also breeds readily with the Goldfinch; not so easily with the cock Linnet; and even produces, though with more difficulty, under the male Chaffinches, Yellow-hammers, and Sparrows; whereas the male Canaries cannot impregnate the females of these Nature is therefore more uniform and permanent in the male than in the female; in the former the characters are deeply imprinted; in the latter, the qualities are modified by the influence of external causes. In the few experiments which I have made on the union of some contiguous species of quadrupeds, I observed that the ewe easily bred under the he-goat; but that the ram could not propagate upon the she-goat. I have been told of an instance in which a stag covered a cow; but the bull has been known to copulate with the hind. The mare breeds more readily with the jack-ass, than the The-ass with the stallion. In general, mules partake more of the characters of the female than of the male, whose features are more strongly marked.—These facts correspond with those we have

have mentioned with regard to the cross-breed of birds. It is evident that the female Canary much more related than the male to the species of the Yellow-hammer, of the Linnet, of the Chaffinch, and of the Sparrow; since it breeds with all these, while the male will not. I use the term will, for perhaps it is only from a want of resolution that the semale yields to the solicitations of those of a different species: however, an examination of the products of this intermixture affords conclusions that agree with all that I have said of the generation and developement of animals; and as the subject is important, I shall here state the principal sacts.

The first variety which seems to constitute two distinct families in the species, consists of the variegated Canaries, and those whose plumage is uniform. The white fort, or the yellow-citron, are never variegated; only when the latter are four or five years old, the tips of the wings and of the tail become white. gray kind are not of an uniform colour; fome feathers are affected by different shades, and fome individuals are of a lighter or of a darker tinge. The agate is spread uniformly, though it varies in the intenfity. The pink coloured are more fimilar, the tint being uniform, not only in different individuals, but in different parts of the fame individual. In those which consist of feveral colours, the Yellow Jonquil fort are variegated with blackish, and are commonly black on. the the head. In some Canaries, the plumage is tinctured with all the simple colours which we have mentioned; but the Yellow Jonquil are the most variegated with black.

When Canaries are paired of an uniform. colour, that of their young is also uniform. If both parents are gray, for instance, the progeny is also commonly gray; and this is the case with the pink, with the white, with the yellow, and with the agate. If the parents be of different colours, the fruits of their commerce will have a richer plumage; and as the combinations that can take place are numerous, an immense variety of tints may be produced. But when the Canaries of an uniform colour are croffed with those which are variegated, the changes are prodigiously multiplied, and there is scarce any limit to the sportive modifications. Nay, it often happens that parents of an uniform colour have beautiful variegated offspring, derived from the mixture of shades in themselves or their progenitors \*.

With respect to the intercourse of the Canary with birds of other species, I shall here state the observations which I have collected. Of all

<sup>\*</sup> To have beautiful birds, we must pair the flaxen variegated male with a white-tailed yellow female; or at least a variegated male with a white-tailed flaxen female, or any other-female that is white-tailed, except only the gray. And when we want to obtain a fine Jonquil, we should fet a black variegated male with a white-tailed yellow female. Anusemens Innocens.

the Canaries, the Cini or Green Canary has the strongest voice, and appears to be the most vigorous, and the most ardent in propagation; it is sufficient for three female Canaries, and while they are fitting in the nests, it supplies them and their young with food. The Siskin and the Goldfinch are neither so powerful nor so assiduous, and a fingle female Canary fatisfies their appetite.

The cross-breed of the Cini, of the Siskin, and of the Goldfinch, with the hen Canary, are stronger than the Canaries, sing longer, and sheir, notes are fuller and more fonorous; but they are flower in receiving instruction: for the most part, they whiftle imperfectly, and feldom one can be found that can repeat a fingle air complete.

When we wish to have a breed of the Goldfinch with the hen Canary, the former should be two years old, and the latter one, for the Canary arrives fooner at maturity. It will be better if both be reared together, though that precaution is not absolutely necessary; and the Author of "the Treatife on Canaries" is miftaken in afferting, that the hen must never have had commerce with a male of her own species, and that this would prevent her from receiving those of a different kind. The following fact is directly contrary to this opinion: "I happened," fays Father Bougot, "to put twelve Canaries together, four males and eight females.

Bad chickweed killed three of these males, and all the females loft their first hatch. In the stead of these Cock-Canaries, I thought of substituting three male Goldfinches which I caught, and put them into the volery in the beginning of May. I had, towards the end of July, two nests of young, which thrived as well as possible; and in the following year, I had three hatches of each cock Goldfinch with the female Canaries. These commonly do not breed with the Goldfinch, except from the age of one while they continue prolific with their own males till eight or nine: and it is only the variegated female that breeds with the Goldfinch after its fourth year. We must never put the Goldfinch into a volery, for it demolishes the nests, and breaks the eggs of the other birds." It appears then that the hen Canaries, though accustomed to the commerce of their own species, listen to the invitation of the male Goldfinches, and fubmit without reluctance to their embraces. The union is even as productive as with their proper mates, fince they have three hatches a-year with the Goldfinch. The case is different in the intercourse of the cock Linnet with the Canary, there being commonly but one hatch, and very feldom two in the year.

The progeny of the Canaries with the Siskins, with the Goldfinches, &c. are prolific, and can breed not only with both the species from which

they sprung, but likewise with each other; and thus may perpetuate an endless variety \*. We must own, however, that the fruits of the intermixture in these hybrids are far from being so - certain or fo numerous as in the pure species; they generally have only one hatch a-year, feldom two, their eggs are often addle, and the fuccess depends on many minute circumstances, which it would be impossible to observe, and still less to describe with precision. It is said, that in these there are always more males than females. "A hen Canary (fays Father Bougot) and a Goldfinch have, in the same year at three different times, laid me nineteen eggs, which all hatched, and of the young were only three females." It would be proper to afcertain this fact by repeated observations. In the pure breeds of several birds, as in the partridges, it has also been remarked that the males exceed the females. The fame remark applies to the human race: in our climates, seventeen boys are born for fixteen girls. We know not the precise proportion between the male and female partridges, but that the former are more numerous than the latter we are certain, because in the pairing

<sup>&</sup>quot; Sprengel has made many observations with regard to the cross-breeds of the Canaries with other species, and particularly with the Goldsinches; he has shewn that the progeny continued to propagate with each other, and with the parent races. The proof which he has adduced is complete, though before him these hybrids were considered as sterile. Anusemens Innocens.

feason, there are always cock birds that want mates. It is likely, however, that fixteen to three, as in the cross-breed of the Canary and Goldfinch, is a greater inequality than ever takes place. in a pure breed. I have been told, that the shemules, got between the ass and the mare, exceed in number the he-mules; but I could never obtain accurate information on that subject. · business then is to determine by observation the number of males and of females in the pure race of the Canary, and afterwards to examine if that of the males be still greater in the crossbreed of the Goldfinch and hen Canary. What disposes me to entertain this opinion is, that the character of the male is in general more deeply impressed on the progeny, than that of the fe-These hybrids, which are stronger than the Canaries, and have a louder voice, are also longer lived. But there is an observation which applies alike to all, that the period of their lives. is abridged by their ardour in propagation. A cock Canary raised by itself, and without intercourse with the female, lives generally thirteen or fourteen years; and the cross-breed of the Goldfinch will reach its eighteenth or nineteenth year. The cross-breed of the Siskin, if kept apart from the females, live fifteen or fixteen Whereas the cock Canary, which has one or several females, seldom lives longer than ten or eleven years; the cross-breed of the Siskin eleven 12

or twelve, and that of the Goldfinch fourteen or fifteen. It is also necessary to part them from the females after the time of hatching; that is, from the month of August to that of March; else the heat of their passion would waste them, and abridge their lives by two or three years.

To these remarks, which are all interesting, we may subjoin a general and more important observation, which may throw some light on the generation of animals, and the developement of their different parts. It has been constantly noticed in the copulation of the Canaries, both with those of their own species and with those. of other races, that the offspring resembled the father in the head, the tail, and the legs, and the mother in the rest of the body. The same has been observed in quadrupeds. The mule got between the jack-ass and the mare, has the thick body of the former, and the ears, the tail, and the thin legs of the latter. It appears therefore that, in the mixture of the two seminal liquors, however intimate we suppose it to be, the organic molecules furnished by the female occupy the centre of that living sphere which increases in all dimensions, and that the molecules injected by the male furround and inclose these; so that the extremities of the body proceed more imdiately from the father than from the mother. The skin, the hair, the colours, which may be confidered as the exterior of the body, retain most of the paternal impressions. In the crossbreed

breed which I obtained from the copulation of the he-goat with the ewe, they all had, instead of a soft sleece, the shaggy coat of the male. In the human species, we may generally perceive, that the son resembles the father more than the mother, in his legs, his feet, and his hands; in his writing, in the quantity and colour of his hair, in his complexion, and in the bulk of his head! and the mulattoes born of a negress lose more of the dark tinge than those of a white woman. All these facts seem to confirm our general idea, that the semale molecules occupy the centre of the factus, and, though brought into the closest union, are more abundant near the surface.

In general, the beauty of the species can never be improved or even preserved, without crossing the breed: and the elegance of form, the strength and vigour of the body, depend almost solely on the proportion of the limbs. Accordingly, it is the males alone, which in man and in the animals ennoble the race. Large, generous mares, covered by forry little horles, have always illmade colts; but a fine Rallion will get a beautitiful progeny from even the ugliest mares, and the more diffimilar are the kinds of the parents. the handsomer will be the offspring. The same may be faid of sheep: the breed is always improved by strange rams, while the ordinary small fort can never get good lambs from the most excellent ewes. I could enlarge upon this important subject,

subject, but I should make too long a digression. Yet, to detail all the facts respecting the intermixture of animals, would be the most real fervice that can be rendered to Natural History. As many people employ or amuse themselves in breeding Canaries, which requires little time, numerous experiments might be made by crofsing them, and continuing to mix the fruits of I am confident that, by combinthe embrace. ing these observations with those upon the quadrupeds and upon man, we might be able to estimate the precise influence of the male in generation, compared with that of the female; and confequently, from the general relations, to pronounce whether fuch a male would fuit fuch a female, &c.

But in the quadrupeds, as well as in man and in the small birds, the difference of the moral qualities often disturbs the correspondence of the physical properties. If any thing could prove that the character of the individual is an original impression of nature which education can never alter, it is an instance in the Canaries, They ":.almost always," says Hervieux, " differ from " each other in their tempers; fome males are "always fad, and, las, it were, absorbed in re-"weries, generally bloated, and fing but fel-" dom, in na mournful tone... 33 frequire nan "immense time to learn, are impersectly acquainted with what they are taught, and eafily " forget it. ... These Canaries are often so slo-" venly, C 3

"venly, that their feet and tail are always dirty;
"they never gain the affection of their females,
"which they foothe not with their fong, while
"engaged in hatching; and the young are
little better than their fathers... There are
other Canaries which are so wicked, that they
kill the female; the only way to succeed is,
to give them two semales, which will unite in
their common defence; and after subduing
their mate by force, they will retain the dominion by love \*. Others are of a disposition so barbarous, that they break the eggs
and eat them; or if these have escaped their
ferocity, they lay hold of the callow brood by

\* " Sometimes the pravity of their disposition is in a certain measure compensated by other qualities; such, for instance, as their melodious fong, their beautiful plumage, and their familiar turn. If you would wish to make them breed, you must give them two strong females one year older than themselves; and the semales should be accustomed for several months previous to live in. the same cage, that they may have no jealousy to each other. And a month before the love-season, they must be both set together in the breeding cage, and at the proper time the male should be let in among them. He will be very quarrelsome the first three days, but the females, uniting against him, will certainly in the end gain the ascendant, and he will be obliged to submit, and at last become attached to them. These kind of forced marriages often fucceed better than others from which more might be expected. To preferve the hatch, the first egg should be removed, and an ivory one put in its place; the same must be done the following days, always taking them away as fast as they are laid, lest the male should break them; and after the last egg is dropped, the male must be shut in a separate cage, and the semale permitted to hatch undisturbed. After the young are ready to be taken from ,the mother, the prisoner may be returned to his female."

Traité des Serins des Canaries.

the bill, drag them into the cage and murder them \*." Some are so wild and independent, that they will not suffer themselves to be touched or caressed, and can neither be governed nor treated like the rest: they spurn at the least interference, and it is only when lest to the impulse of their humours that they will couple and breed. Others are excessively indolent; the gray for instance scarcely ever take the pains to build a nest, but it must be provided for them, &cr. All these characters are, we see, very different from each other, and from those of our favourite Canaries, which are ever joyous, and ever chanting; are

\* "There are males of a weak habit, indifferent about the females, and always fick after neftling; these must not be paired, for I observe that the offspring resemble the father. There are others fo libidinous, that they drive the female from her nest, and would not allow her to fit; these are of a hardy constitution, have a superior song, a finer plumage, and are tamer. Others break the eggs, and kill the young, the more to enjoy the female. Others shew a predilection for an individual, and will, out of twenty, select their favourite, to which they will pay particular attention. Those have a good temper, and will communicate it to their progeny. Others discover fondness for no female, and remain inactive and unproductive. The same difference of character and temperament are to be found in the females. The jonguil females are most gentle; the agate fort are capricious, and often defert their young to join the male; the variegated females are assiduous on their eggs and affectionate to their young, but the variegated males are the most ardent of all the Canaries, and must have two or three females, else they will drive them from the nest and break the eggs. Those which are entirely jonquil have nearly the same fire of temper, and require two or three females. The agate males are the feeblest, and the females of that kind often expire upon their eggs." Note communicated by Father Bougor.

fo tame and fo lovely; are excellent hufbands, and affectionate fathers; are of so mild a temper, and of fo happy a disposition, that they receive every generous impression, and glow with each exalted feeling. They continually amuse the female by their fong, they footh the languor of her occupation, they entreat her to take-relief in hatching, and, in her place, they fit feveral hours every day; they also feed the young; and lastly, receive whatever instructions From these alone we are to judge of are given. the species, and I mention the others only, to shew that, even in animals, the temper is dérived from nature, and not formed by education.

Moreover, the apparently wicked disposition, which drives them to break their eggs and kill their young, proceeds often from the fire of their amorous passions. To enjoy the female oftener, and riot in the fulness of pleasure, they plunder the nest, and destroy the dearest objects of their affection. The best way to breed from these birds, is to separate them, and put them in the cage; it will be much better to give them a chamber having a funny aspect, and facing the east in winter. For in the cage they will break the eggs to repeat their embrace; but when they are lodged in an apartment where there are more females than males, they will pay their addresses to another, and allow the first to hatch undifturbed. Besides, the males, from jealousy, will

not suffer disorders to be committed; and when one is prompted by ardor to tease his semale and break her eggs, they give him a sound beating; sufficient to mortify his concupiscence.

The materials given to build their nest, are the scrapings of fine linen rags, cows and stags hair, useless for other purposes, moss, and slender dry stalks of hay. The Goldsinches and Siskins, when lodged with the hen Canaries, to obtain a cross-breed, make use of the moss and hay, but the Canaries prefer the hair and lint; but these must be well divided, lest the sibres, sticking to their feet, should occasion the eggs to be broken.

To feed them, a crib is placed in the chamber, which is pierced all round with holes that admit the head; and into it a portion of this mixture is put; three pints of rape-feed, two of oats, two of millet, and laftly, a pint of hemp feed, and the crib is replenished every twelve or thirteen days, taking care that the grains be well cleaned and winnowed. This food is proper when they are only fitting; but the day before the young are excluded from the shell, the parents ought to have a dry cake baked without falt, and after eating it; they should have hard boiled eggs; one dbeing sufficient for two males and four females, and two for four males and eight females, and so on in proportion. They ought to have no fallad or greens while rearing the offspring, for this would weaken much the young. to vary somewhat their diet, they should every three

three days be presented on a plate with a bit of white bread soaked in water, and squeezed in the hand; this being not so rich as the cake, and preventing them from growing too fat while breeding. It would also be proper to give them a few Canary seeds\*, but only once in two days, lest they be heated too much. Sugar biscuit commonly produces that effect; and is attended with another still worse, that the hens fed on it lay eggs that are addle, or too small and tender. When the eggs are small, the rape-seed should be boiled every day to blunt its acrimony. "Long experience," says Father Bougot, "has informed us, that this sort of food agrees best, whatever the authors, who have written on Canaries, may assert."

After the hatch, the Canaries ought to be purged with plantain and lettuce-feeds; but care must be taken to remove the young birds, which would be greatly weakened by this regimen, and the parents must not be confined to it longer than two days. When you want to feed them with the stick, you ought not, as most bird-catchers advise, leave them with the mother till the eleventh or twelfth day; you ought to remove them with their nest as early as the eighth day. The food for the young

<sup>\*</sup> Alpis in French, the Canary-grass being termed Alpise. It is the Phalaris Canariensis of Linnæus. It is a native of the Canary islands, whence it springs spontaneously in the corn fields; but is now cultivated in small quantities in many parts of Europe.

Canaries ought to be prepared before hand; it is a passe composed of boiled rape-seed, yolks of eggs and crumbs of cake mixed together, and beaten up with a little water. It ought to be given to them every two hours, and rammed into their bill. It must not be too liquid, lest it turn sour, and it must be made fresh every day till the young can eat without assistance.

The produce of these captive birds is not so regular, but appears to be more numerous than it probably would be in the state of liberty. Some semales have four or sive hatches annually, and lay four, sive, six, or even seven eggs each time; and generally they have three hatches, and the moulting hinders them from another \*. Some however sit even during moulting, if they happen to be laying before that season. The birds of the same hatch do not all moult at the same time. The weakest first drop their seathers, and the strongest more than a month afterwards. In Jonquil Canaries this change

<sup>\* &</sup>quot;There are females which never lay at all, and are called brehaignes (barren); others lay only once or twice in the whole year, and even repose two or three days between the first and second egg. Others have only three hatches, which are regular, consisting of three eggs laid without interruption. A fourth fort, called the common, because the most numerous, may have four hatches of four or five eggs, but not always uniform. Others are still better layers, having five hatches, and still more if allowed; and in each of these are fix or seven eggs. When this kind feed well, they are excellent, and we cannot be too careful of them, for they are worth half a dozen of the ordinary Canaries."

of plumage is tedious, and commonly more dangerous than in the other kinds. The female Jonquils have only three hatches, each of three eggs; the flaxen coloured Canaries are too delicate, and their brood feldom thrives. The Pink'shew a reluctance to pair with each other; in a large volery, the male but rarely couples with the female of his own colour, and to form the union, they must be confined together in a cage. The white fort are commonly valuable in every respect; they lay and breed as well, or rather better than the others, and the variegated white are the hardiest of all.

Whatever differences there may be in the difpolitions and prolific powers of these birds, the period of incubation is the fame; all of them fit . thirteen days; and when the exclusion of the young is a day earlier or later, it is owing to some particular circumstance. Cold retards the process, and heat forwards it; accordingly the first hatch, which is in April, requires thirteen days and a half, or even fourteen days, if the weather is chilly; but the third, which happens during the heats of July and August, is effected in twelve days and a half, or even twelve days. It would be proper to separate all the good eggs from the bad; and, to do this with certainty, we ought to wait to the eighth or ninth day, and take each gently by the two ends for fear of breaking it, and examine it in a strong light, or by a candle, and reject all that are addle, which if left would

would only fatigue the hen. By this trial we may often reduce three hatches to two; and in that case the third female may be liberated, and permitted to begin a fecond nest\*. A plan strongly recommended by bird-fanciers is to remove the eggs as they are dropt, and to fubflitute in their flead eggs of ivory; fo that after the laying is over, the real eggs are restored; and all hatch at the same time. Commonly the egg is dropt at fix or feven o'clock in the morn. ing, and it is faid that if it be a fingle hour later the bird is fick; and, as the laying proceeds thus regularly, it is easy to remove the eggs as fast as they are excluded †. But this precaution is more fuited to the convenience of man than confonant to the train of Nature. When five or fix young are hatched at once, they exhaust the vigour of, the mother; and rather damp her spirits; but if they appear successively, they repeatedly renew her pleasure, and inspire new courage to discharge her duty. Intelligent persons who have

<sup>\*</sup> When the eggs of one female are set under another, they must be all found. If addle or tainted eggs be given the variegated females, they will throw them out of the nest; and if the nest is too deep to admit their being tumbled out, they peck them till broken, which often spoils the nest, and frustrates the whole hatch. Females of other colours cover wind eggs when placed under them. Nate communicated by Father Bougor.

<sup>†</sup> The laying is always at the same hour, if the semale is healthy; however, the last egg must be excepted, which is commonly several hours later, and often a day. This last egg is always smaller than the rest; and I am told that it always gives a cock-bird. It would be curious to ascertain this singular fact.

had experience in breeding these birds assure me, that they always succeed best when they do not employ this artificial expedient.

We may affert that, in general, all the nice precautions, and the refined manœuvres recommended by writers for training the Canaries, are pernicious rather than useful; and that in every respect we ought as much as possible to copy Nature. In their native country they haunt the fides of fmall rivulets, or wet gullies \*; we ought therefore to give them plenty of water, both for drinking and bathing. As they belong to an exceedingly mild climate, they must be sheltered from the rigours of winter. It appears indeed that being long naturalized in France, they can bear the cold of that country; for they may be kept in a chamber without a fire, and even without a glass-window, a wire-grate to prevent their escape being sufficient; several dealers in birds have informed me that they lost fewer in this way than when the rooms were heated by a fire." The same may be said of their food, which is probably the more fuited to them the simpler it is †. A circumstance that requires

<sup>\*</sup> The Canary Finches imported into England are bred in the barances, or gullies formed by the torrents from the mountains. Hist. Gen. des Voyages.

<sup>+</sup> I have often observed from my own experience, and from that; of others who adhered scrupulously to all the minute directions given. by authors, that extreme care and attention often killed their birds. A regular diet of rape-seed and millet, water every day in winter, and

the most attention is not to hasten their sirst hatch; it is common to allow them to couple about the twentieth or twenty-sists of March, but it would be better to wait till the twelsth or sisteenth of April; for if the season be cold, they are apt to contract a disgust to each other; and if the semales happen to have eggs, they abandon them, at least till the weather grows warm: and thus a whole hatch is lost in attempting to accelerate the breeding.

The young Canaries differ from the old ones, both in the colour of their plumage, and in some other circumstances. "A young Canary of the same year (observed on the thirteenth of December 1772\*) had its head, its neck, its back, and the quills of the wings blackish, except the sour first quills of the left wing, and the six first of the right, which were whitish; the rump, the coverts of the wings, the tail, which was not entirely formed, and the under part of the body, were also of a whitish colour; and there were as yet no feathers on the belly from the sternum to the

and once or twice a day in summer; groundsel, when it is to be had, in the month of May; chickweed in the time of moulting, and instead of sugar, bruised oats and Turkey wheat, and above all great cleanliness, areall that I would recommend. Small Tract on the Breeding of Canaries, communicated by M. Batteau, Advocate at Dijon.

N. B. I must here correct a small error. All the bird-catchers whom I have consulted tell me, that we ought to avoid giving them chickweed in the time of moulting, for it is too cooling, and would protract their state of indisposition. The other directions of Batateau seem to me well founded.

<sup>\*</sup> Note communicated by M. Gueneau de Montheillard.

anus. The lower mandible was impressed into the upper, which was thick, and somewhat incurvated." As the bird grows up, the arrangement, and the shades of colour, change; the old ones can be distinguished from the young by: their strength, their plumage, and their song; the tints are deeper, and more lively; their toes are rougher, and incline more on black, if they are of the gray kind; their nails are also thicker, and longer than those of the young ones \*. 'The' female is often so like the male that they cannot at first be distinguished; however, the colours are always deeper in the male, the head rather thicker and longer, and the temples of a yellow, more inclined to orange; and under the bill there is a fort of yellow flame which descends lower than in the female; its legs are also stronger; and lastly, it begins to warble almost as foon as it is able to feed by itself. It is true that some females chant at that tender age with almost as much spirit as the males: but, joining all these marks together, we may be able even before the first month to decide which are males or females; after that time there is no more uncertainty in that respect, for the song of the males then begins to betray their fex.

Every sudden utterance of sound is in animals an obvious sign of passion; and as love is of all the inward feelings that which the oftenest,

<sup>\*</sup> Amusemens Innocens, p. 61 & 62.

and the most forcibly agitates the frame, the ardor is constantly marked by the expression of the voice. The birds by their fong, the bull by his lowing, the horse by his neighing, the bear by his loud murmur,  $C_c$ . all announce the working of the same desire. The appetite is much calmer in the female than in the male, and accordingly it is but feldom expressed by the voice. The chant of the hen Canary is only a feeble tone of tender satisfaction, a coy assent to the warm applications of her mate, and inspired by the eloquence of his warble; but when this paffion is once excited in her veins, it becomes neceffairy to hers existence; and if she be parted from her lover, she sickens and dies.

'It seldom happens that the Canaries bred in a chamber are indisposed before laying; some males only exhaust their vigour, and fall victims to the ardor of passion. Is the semale becomes fick while hatching, her eggs must be taken from her, and given to another; for though fhe recovers foon, the would not fit on them again. The first symptom of bad health, especially in the males, is fadness; as soon as they lose their natural cheerfulness, they ought to be put alone in a cage, and fet in the fun in the chamber where the female is lodged. If he becomes bloated, we must notice if there be a pimple below his tail; when this pimple is ripe and white, the bird itself often pierces it with the bill; but if the suppuration advances too flowly, VOL. IV. D

flowly, we may discharge it with a large needle, and then fill the wound with spittle without salt, which would be too fmarting. Next day the patient should be let loose in the chamber, and it will be easy to perceive by his treatment of the female, and the fondness that he shews, whether he is cured or not. In this last case, we must take him again, and blow through a small quill some white wine under his wings, place him in the fun, and notice next day the state of his health. If he still continue dejected, and indifferent to his female, his recovery is now almost desperate; we must remove him into a separate cage, and give the hen another - male like the one she has lost; or if such cannot be had, we must seek one of the same species at least. A greater fondness commonly subsists between those that resemble each other, except in the case of the Pink Canaries, which prefer the females of a different colour: but this new male must not be a novice in love, and consequently must have already raised a hatch. the female falls fick, the same treatment may be ufed.

The most common cause of distempers is the too great plenty, or richness of food. When these birds make their nests in a cage, they often eat to excess, or select the nutritious aliments intended for their young; and most of them sicken from repletion, or inflammation. If they be kept in a chamber, this danger is in a great

measure removed, their numbers preventing their gluttony. A male which fits too long, is fure ofbeing beat by the other males; and the same is the case with the females. These quarrels give them exercise, and necessarily produce temperance; and for this reason chiefly it is that they. feldom are ever fick in a chamber during the time of breeding: their infirmities and difeases appear only after they have hatched; most of them have first the pimple which I have mentioned, and then they all undergo the moulting. Some support well this metamorphosis, and still fing a part of the day; but most of them lose their voice, and a few languish and die. After the females are fix or feven years old, many of them die in changing their plumage; the males ' recover better from the attendant fickness, and furvive their mates three or four years. Indeed we must consider moulting as the regular process of Nature, rather than as an accidental distemper; and if these birds were not reduced by us to captivity, and rendered delicate by our treatment, they would fuffer only a flight indifposition, and would spontaneously discover the proper remedies: but at present it is a grievous fickness, often fatal, and which besides admits of few remedies; it is however the less dangerous the earlier it happens\*. The young Canaries drop

<sup>\*</sup> In the time of moulting, a bit of steel, and not of iron, should be put in their water, and changed thrice a-week. No other remedies

drop their feathers the first year six weeks after they are hatched; they become low-spirited, appear bloated, and conceal the head in their plumage: at this time the down only falls; but the following year they lose the quill's, eventhose of the wings, and of the tail. The young birds of the later hatches which happen in September or after, fuffer much more from the moulting, than those which are excluded in the fpring; in that delicate condition the cold is extremely pernicious, and they would all perish if not kept where it is temperate, or even pretty warm. As long as the moulting lasts, that is . fix weeks or two months. Nature labours at the production of new feathers; and the organic molecules, which were before directed to the supply of the seminal liquor, are now absorbed in this growth; and hence the exuberance of life being diverted into different channels, their ardor ceases, and the business of propagation is for the time suspended.

The most fatal and the most common distemper, especially in young Canaries, is what is called the *swallow* (avalure), in which the bowels seem to be *swallowed*, and drawn to the extremity of their body; the intestines are per-

medies are needed, though Hervieux reckons several; only during this critical period, a rather larger portion of hemp-seed should be mixed with their usual food. Note communicated by Father Bougor.

Observe that steel is recommended instead of iron, only lest the iron should be rusty, in which case it would be more pernicious than useful.

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# THE CANARY FINCH.

ceived through the skin of the belly in the state of inflammation, redness, and distension; the feathers on that part drop, the bird pines, gives over eating, though always fitting beside the food, and dies in a few days. The fource of the disease is the excessive abundance or richness of the aliments. All remedies are vain; and the change of regimen is the only thing which can recover a few out of a great number. The bird is put into a separate cage, and given water and lettuce feeds; thus the heat that confumes it is tempered, and evacuations are fometimes performed which fave its life. This diftemper also is the fruit of their artificial education, for it feldom attacks those which are trained by their parents; we ought therefore to take the greatest care not to overfeed them with the stick; boiled rape-feed, and some chickweed, are proper, but no fugar or biscuit; and in general we should give them too little rather than too much.

When the Canary utters a frequent feeble cry, which feems to come from the bottom of its breast, it is said to be asthmatic; it is also subject to a certain obstruction of voice, especially after moulting. This sort of asthma is cured by giving it the seeds of plantain, and hard biscuit soaked in white wine; and to restore its voice it ought to have generous food, such as yolks of eggs beat up with crumbs of bread; and for drink, liquorice-water, that is water in which that root has been steeped and boiled.

The

The Canaries are also subject to a fort of shanker on the bill. This disorder is owing to the same cause with the swallow, the abundance or richness of food producing an inflammation, which, instead of affecting the intestines, sometimes extends to the throat or palate; the same cooling remedies must be applied; they should be given lettuce-seeds, and bruised melon-seeds mixed with their drink.

The mites and the scab with which these fmall birds are fometimes affected are generally owing to the dirtiness with which they are kept. Care must be taken to preserve them clean, to give them water to bathe in, to avoid putting old or bad wood in their cages, and to cover them only with new cloth that is not moth-eaten: and the feeds and herbs with which they are to be fed should be fanned and washed. must pay this attention, if we would wish them to be neat and healthy. In the state of nature they would themselves preserve cleanliness; but imprisoned, they are subject to the loathsome disorders incident to that state: however, many of these birds, though reduced to the melancholy condition of captivity, are never fick, and in these habit seems to have become a second nature. In general, the fource of their diseases ' is the heat of their constitution. They always need water; and if a plate with fnow be placed in the cage, or even in the volery, they will roll in it feveral times with expressions of pleasure, though

though in the coldest weather. This proves that it is rather pernicious than useful to keep them in very hot places\*.

But there is another distemper to which the Canaries and many other birds are subject +, especially in the state of confinement: this is the epilepfy. The yellow Canaries in particular are oftener than the others feized with the falling fickness, which attacks them suddenly, and even furprises them in the midst of their most impassioned warble. It is said that they must not be touched the moment they fall, but must be watched till they discharge a drop of blood from the bill, and that they may be then lifted up, and will recover themselves, and in a short time refume their fenses and their life: that it is neceffary to wait till Nature makes that falutary effort which is announced by the expression of the drop of blood, and that if handled prematurely, the violence of agitation would bring on instant death. It is to be wished that this obfervation were ascertained, some circumstances in which appear to me rather doubtful. Certain ' it is, that if they escape the first attack of this '

<sup>\*</sup> These birds require not to be kept in a warm place, as many pretend; in the most intense colds they welter in snow, when present, ed them on a plate. For my own part, I have them in a chamber in winter with only an iron-grating, and the windows open; they sing admirably, and I never lose any. Note communicated by Father Bougor.

<sup>†</sup> The Jays, the Goldfinches, all the Parrots, and the largest Aras.

epilepsy, they live a long time after, and sometimes attain the same age with those which have never been affected by that distemper. However, I am inclined to think, that a small incision in the toes would be beneficial, for in that way Parrots are cured of the epilepsy.

What miseries in the train of slavery! Would these birds, if they enjoyed their native freedom, be asthmatic, scabby, and epileptical? Would they be afflicted by inflammations, abfceffes, and shankers? and the most melancholy of disorders, what is produced by the craving of unfatisfied lust, is it not common to all beings reduced to captivity? In particular, the females, whose feelings are so nice and so tender, are more subject to it than the males. It has been observed. that after the hen Canary falls fick in the spring before pairing, she shrinks, languishes, and dies. The amorous passion is awakened by the singing of the males around her, while she has at the fame time no opportunity of gratification. males, though they first feel libidinous desires, and always appear more ardent, support better the languor of celibacy; they feldom die of continence, but they are often killed by excessive venery.

The hen Canaries can, like the females of other birds, lay eggs without commerce with the male. The egg in itself is, as we have elsewhere obferved, only a matrix which the bird excludes, and will remain unprolific, if not impregnated

with the feed of the male; and the heat of incubation, instead of quickening it, only hastens its putrefaction. It has also been remarked that if the females be entirely separated from the males, so as not to see and hear them, they very seldom lay; and that they oftenest drop their eggs, when melted by the view or the song of the males: so much do even distant objects act upon seeling animals, and so many are the ways in which the subtile slame of love is communicated \*!

I cannot better close this article, than by an abstract of a Letter of the honourable Daines Barrington, Vice President of the Royal Society, to Dr. Maty the Secretary.

"Most people who keep Canary birds do
"not know that they sing chiefly either the
"Titlark or Nightingale notes †.

" Nothing,

- \* We shall here mention two facts to which we were witness. A female sung so well, that she was taken for a male, and paired with another semale; the oversight being afterwards discovered, a male was given to her, who taught her the proper functions of her sex; she took to laying and renounced her song. The other saft is that of a semale, alive at present, that chants or rather whisles a tune, though she has laid two eggs in her cage, which are sound to be addle, as all those are which hens lay without the commerce of a cock.
  - † I once saw two or three birds which came from the Canary Islands, neither of which had any song at all; and I have been informed, that a ship brought a great many of them not long since, which sung as little.

Most of the Canary birds which are imported from Tyrol, have been educated by parents, the progenitor of which was instructed

"Nothing, however, can be more marked than

" the note of a Nightingale called its jug, which

" most Canary birds brought from Tyrol com-

"monly have, as well as feveral Nightingale

" ftrokes, or particular passages in the song of

" that bird.

" I mention the superior knowledge in the

" inhabitants of the capital, because I am con-

" vinced that, if others are confulted in rela-

" tion to the finging of birds, they will millead,

" instead of giving any material or useful in-

" formation."

by a Nightingale; our English Canary birds have commonly more of the Titlark notes.

The traffic in these birds makes a small article of commerce, as four Tyroleze generally bring over to England 1600 every year; and though they carry them on their backs one thousand miles, as well as pay twenty pounds duty for such a number, yet upon the whole it answers to sell these birds at five shillings appiece.

The chief place for breeding Canary birds is Infpruck and its environs, from whence they are fent to Constantinople, as well as every part of Europe. Phil. Trans. vol. lxiii. part 2. 10 January 1972.

nuary 1773.

# FOREIGN BIRDS, THAT ARE RELATED TO THE CANARIES.

THE foreign birds which may be referred to the Canary, are few in number; we are acquainted with only three species. The first is that which was fent to us from the eastern coast of Africa, under the name of the Mozambique Canary, which feems to be a shade between the Canaries and the Siskins. It is delineated Pl. Enl. No 364, Fig. r. and 2. Yellow is the prevailing colour of the lower part of the body, and brown that of the upper, except the rump and the coverts of the tail, which are yellow: these coverts, as well as those of the wings and their quills, are edged with white or whitish. The fame yellow and brown occur on the head, distributed in alternate bars; that which sfretches over the top of the head is brown, next two. yellow ones over the eyes, then two brown ones Which rife behind the eyes, after these two yellow ones, and last of all two brown ones, which extend from the corners of the bill. is rather smaller than those from the Canary Islands; its length from the tip of the bill to the end of the tail is about four inches and a half, that of the tail is only about an inch. The female

female differs very little from the male, either in fize or in colour. This bird is perhaps the fame with that of Madagascar, mentioned by Flaccourt under the name of *Mangoiche*, which he says is a species of Canary.

It is likely that this bird, which in its plumage resembles much our variegated Canaries, was their progenitor; and that the entire species belongs only to the ancient continent, and to the Canary Islands, which may be considered as adjacent to the mainland: for the one mentioned by Brisson under the name of the Jamaica Canary, and of which Sloane and Ray have given a short description \*, appears to me to be widely different from our Canaries, which are not found at all in America. Historians and travellers inform us, that none were originally in Peru, and that the first Canary was introduced there in 1556, and that the spreading of these birds in

\* "Bird like the Serin, variegated with cinereous, dilute, yellow, and dusky colours." Its extreme length is eight inches, its alar extent is twelve inches, the bill short and strong, three-fourths of an inch long (or one-third according to Ray), the tail one inch, the leg and foot one inch and one-fourth. (Brisson suspects that Sloane is mistaken in his measures, for the proportions are not consistent.) The upper mandible brown bordering on blue, the lower lighter coloured; the head and the throat gray; the upper part of the body of a yellow-brown, the wings and the tail of a deep brown, radiated with white, the breast and belly yellow, the under part of the tail white, the feet bluish, the nails brown, hooked, and very short. Sloane's Jamaica.

It is the Fringilla Cana of Linnzus; and Gray-headed Finch of Latham: Its specific character:—" It is dusky yellow above, below "yellow, its head and throat gray, its vent white, its wings and "tail dusky, with white lines."

America,

America, and especially in the Antilles, was long posterior to that date. Father du Tertre relates that du Parquet, in 1657, bought of a merchant who touched at these islands, a great number of real Canaries, which he fet at liberty; fince which time they were heard warbling' about his house; so that it is probable that they have multiplied in that country. If true Canaries be found in Jamaica, they may have been descended from those transported to the Antilles, and naturalized there in the year 1657. However, the bird described by Sloane, Ray, and Brisson, by the appellation of Jamaica Canary, appears to differ too much from the natives of the Fortunate islands, to be supposed to have originated from those transplanted into the Antilles.

While this article was at the press, we received several Canaries from the Cape of Good Hope, among which I have perceived three males, one semale, and a young one of the same year. These males are very like the Green Canary of Provence; they differ in being somewhat larger, and their bills being proportionally thicker: their wings are also better variegated, the quills of the tail edged with a distinct yellow, and they have no yellow on the rump.

In the young Canary, the colours were still fainter and less marked than in the female.

But whatever small differences exist, I am still the more confirmed that the variegated Canaries Canaries of the Cape of Mozambique\*, of Provence, and of Italy, are all derived from the fame common fource, and that they belong to one species, which is spread, and settled in all the climates of the ancient continent suited to its constitution, from Provence and Italy to the Cape of Good Hope, and the adjacent islands. Only this bird has assumed more of the green tint in Provence, more of the gray in Italy, more of the brown or variegated colour at the Cape of Good Hope, and seems by the variety of its plumage to point at the influence of a different climate.

\* It appears that the Mozambique Canary is not confined exclusively to that region. I have found among the drawings of Commerson a coloured figure of this bird very distinctly marked. Commerson calls it the Cape Canary, and informs us that it had been carried to the Isle of France, where it was naturalized, and even greatly multiplied, and was known there by the name of the Bird of the Cape. We may expect to find in the same manner at Mozambique, and in some other countries of Africa, the variegated Canaries of the Cape, perhaps even those from the Fortunate Islands, and probably many other varieties of this species.

#### The WORABEE.

The second species which appears to us to be the nearest related to the Canaries, is a small Abyssinian bird †, of which we have seen

<sup>+</sup> This is the Fringilla Abyssinica of Gmelin, and the Blackllared Finch of Latham. Specific character:—" It is black, yellow above, its collar black, its vent yellow."

the figure excellently delineated and coloured by Mr. Bruce, under the appellation of the Worabée of Abyssinia.

This small bird presents not only the colours of certain varieties of the Canary, the yellow and the black, but it has the same bulk nearly; and except its being rather rounder, the same shape. Its bill is also similar, and it presers an oily seed as the Canary does millet and panic. But the Warabée has an exclusive predilection for a plant that bears the oily seed which I have mentioned, and which is called Nuk\* in the Abyssinian language; it never wanders far from that plant, and seldom loses sight of it.

In the Warabée, the fides of the head, as far as below the eyes, the throat, the fore-part of the neck, the breast, and the top of the belly to the legs, are black; the upper-part of the head and all the body and the lower belly, are yellow, except a kind of black collar, which encircles the neck behind, and is set off by the yellow. The coverts and the quills of the wings are black, edged with a lighter colour; the feathers of the tail are also black, but with a greenish yellow border; the bill likewise is black, and the legs of a light brown. This bird keeps in

flocks,

<sup>•</sup> The flower of this plant is yellow, and of the shape of a creftent; the stalk rises only two or three inches. From the seed an oil is extracted, which is much used by the monks of that country.

flocks, but we know nothing more in regard to its mode of life.

#### The ULTRA-MARINE.

L' Outre-Mer. \* Buff.

The third species also of these Foreign Birds, which are related to the Canary, is known to us from the drawings of Mr. Bruce. I call this Abyssinian bird the Ultra-Marine, because its plumage is of a fine deep blue. In the first year this beautiful colour does not exist, and the plumage is gray as that of the Sky-lark, and this gray always continues in the semale, but the males assume the charming blue the second year, before the vernal equinox.

These birds have a white bill and red legs. They are common in Abyssinia, and never change their habitation. They are nearly of the bulk of the Canaries, but their head is round; their wings extend beyond the middle of the tail. Their warble is very pleasant, and this circumstance seems the more to point out their relation to our Canaries.

<sup>\*</sup> The Fringilla Ultramarina of Gmelin, and the Ultrama: interior of Latham. Specific character:—" It is corrulean, its bill white, its legs red."

## The HABESH of SYRIA\*.

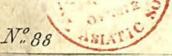
R. Bruce supposes this bird to be a species of Linnet, and I ought to pay deserence to the opinion of so good an observer; but that gentleman having sigured it with a thick short bill, very like that of the Canaries, I have ventured to place it between the Canaries and Linnets.

The upper-part of its head is of a fine bright red; the cheeks, the throat, and the upper-part of the neck are a mottled blackish brown; the rest of the neck, the breast, the upper-part of the body, and the small coverts of the wings, variegated with brown, yellow, and blackish; the great coverts of the wings of a deep ash, edged with a lighter colour; the quills of the tail and the great quills of the wings also cinereous, bordered on the outside with a bright orange; the belly and the under-part of the tail, dirty white, with obscure yellowish and blackish spots; the bill and legs of a leaden colour. The wings reach as far as the middle of the tail, which is forked.

<sup>\*</sup> The Fringilla Syriaca of Gmelin, and the Tripoline Finch of Latham.

# 50 HABESH OF SYRIA.

The Habesh is thicker than our Linnet; its body is also fuller, and it sings prettily. It is a bird of passage; but Mr. Bruce cannot trace its route, and he assures me, that in the course of his travels he never saw it except at Tripoli in Syria.





THE LINNET .

## The LINNET.

La Linotte, Buff.

ATURE herself seems to have assigned these birds a place next after the Canaries; for their mutual commerce succeeds better than the intercourse of either with any other contiguous species; and what points out the closeness of this relation, the progeny is prolific \*, especially when a male Linnet is joined with a female Canary.

Few birds are so common as the Linnet, but still fewer perhaps unite so many amiable qualities: a pleasant warble, a rich plumage, docility of disposition, susceptibility of attachment; pos-fessing whatever, in short, could invite the attention of man, and contribute to his delight. Endowed with such talents, it could not long preserve its freedom; and still less, when nursed in the bosom of slavery, could it retain un-

fullied

<sup>\*</sup> This observation was communicated by Daubenton the younger. Frisch assures us, that pairing a Vine Linnet (Redpole) with a white hen Canary, that was in the habit of coming abroad every day and returning to its roost, it made its nest and laid its eggs in a neighbouring bush, and when the young were hatched, it brought them to the window of the house. He adds, that this cross-breed had the whole plumage of the mother, and the red spots of the father, especially on the head.

fullied the beauties of its original purity. In fact, the charming red colour with which Nature has painted its head and breaft, and which in the state of liberty sparkles with durable lustre, wears off by degrees, and soon disappears entirely in our cages and voleries. There remain only a few obscure vestiges after the first moulting \*.

With regard to the change effected in its fong, we substitute for the free and varied modulations which fpring and love inspire, the strained notes of a harsh music, which they repeat but imperfectly, and which has neither the beauties of art nor the charms of nature. Some have also fucceeded in teaching it to speak different languages, that is to whiftle fome Italian, French, and English words, &c. and sometimes even to pronounce these with considerable fluency. Many persons have from curiosity gone from London to Kensington merely to hear an apothecary's Linnet, which articulated the words pretty boy. The fact is, it had been taken out of the nest when only two or three days old, before it had time to acquire the parent fong; and just beginning to listen with attention, it was struck with the found of pretty boy, and learned it from

<sup>\*</sup> The red of the head changes into a rusty-brown varied with blackish, and that of the breast passes into nearly the same colour; but the new shades are not so deep. An amateur told me, that he has raised some of these Linness which preserved the red: this sact stands single.

imitation \*. This fact, together with many others, appears to me to establish the opinion of the Honourable Daines Barrington, that birds have no innate song; and that the warble peculiar to the different species, and its varieties, have nearly the same origin with the languages and the dialects of various nations †. Mr. Barrington tells us, that in experiments of this kind he preferred a young cock Linnet of three weeks be-

\* A goldfinch which was taken from the nest two or three days after hatching, and set in a window that looked into a garden where the wrens resorted, caught their song, and had not a single note of its own species.

A sparrow was taken from the nest when it was sledged, and educated under a Linnet; but hearing by accident a goldsinch, its song was a mixture of that of the Linnet and the goldsinch.

A robin was fet under a very fine nightingale, which began to be out of fong, and in a fortnight was perfectly mute; the robin had three-parts in four of the nightingale's warble, the rest being a consuled jumble.

Lastly, Mr. Barrington adds, that the Canaries imported from Tyrol seem to have been educated by parents the progenitor of which was instructed by a nightingale; while the Canaries bred in England appear to have derived their song from the tit-lark. Philosoph. Transact. Jan. 10, 1773.

If we breed a young Linnet with a chaffinch, or nightingale, fays Gefner, it will acquire their fong; and particularly that part of the chaffinch's fong that is called the alarum found. RETTERZU, P. 591.

† The loss of the parent-cock at the critical time for instruction occasions undoubtedly the varieties in the song of each species; because then the nestling has either attended to the song of some other birds, or perhaps invented some notes of its own, which are pernetuated from generation to generation, till similar accidents produce other alterations. The truth is, that scarcely any two birds of the same species have exactly the same notes, if they are accurately attended to, though there is a general resemblance. BAR-RINGTON, Philos. Trans. 1773.

ginning to fly, not only on account of its great facility and talent for imitation, but because in that species it is easier to distinguish the fex; some of the outer-quills of the wings in the male having the outer-edge white as far as the shaft, while in the semale these are only bordered with that colour.

It follows from the experiments of this learned gentleman, that the young Linnets educated
by the different kinds of larks, and even by an
'African Linnet, called Vengolina, of which we
shall afterwards treat, acquired not the song of
their parent, but that of their instructor. Only
a few retained the call of its species, or the Linnets chuckle, which they had heard of their parents before they were parted.

It is extremely doubtful whether our Common Linnet, called by some the Gray Linnet, is different from that termed the Vine Linnet, or the Red Linnet: for, 1. The red spots which distinguish the males in the Red Linnet are far from being constant, since, as we have already observed, they become obliterated in consinement\*. 2. They are not a discriminating character.

Of four cock Linnets, which were consequently red, brought to me on the twelfth of July, I exposed one to the open air, and set three in a chamber, two of which were shut up in the same cage. The red on the head of the latter began to disappear by the twenty-eighth of August, and also that on the lower part of the breast. On the eighth of September one of the two was found dead; its head was entirely divested of feathers, and even slightly wounded. I discovered that the one had sought the other after the moulting, as if

racter, as traces of them are to be found in the bird described to be the male of the Gray Linnct, where the feathers on the breast are of a dull red in their middle. 3. The moulting tarnishes, and for a time almost discharges this red, which recovers not its lustre till the fine weather, but from the end of September colours the middle of the feathers on the breaft, as in that reckoned by Briffon a common cock Linnet. 4. Gesner at Turin, Olina at Rome, Linnxus at Stockholm\*, and Belon in France, have known in their respective countries only the Red Linnets. 5. Bird-catchers, who have in France followed that profession more than thirty years, have never found a fingle cock Linnet which had not the red shade corresponding to the feafon; and at the same time we see many Gray Linnets in the cage. 6. Even those who admit

their acquaintance was dissolved by the disguise of plumage. The red of the head of the vanquished Linnet no longer existed, for all the seathers had dropped, and that of the breast was more than half essaced.

The third which was shut up was very late in moulting, and retained its red till that time. The one that was kept in the open air made its escape at the end of three months; but it had already lost all its red.—It follows from this experiment, that either the open air hastens the disappearance of the red, by advancing the moulting; or that the want of fresh air has a smaller share in the change of plumage in these birds than the loss of liberty.

\* No mention is made of the Gray Linnet in the Fauna Suecica: Klein speaks of one Zarn, author of a letter on the birds of Germany, where he endeavours to prove that there is only one species of Linnet. I have heard the same affertion of many bird-catchers, who had never seen the letter; and Hebert, who is certainly a fit judge of the matter, is of the same opinion.

the existence of Gray Linnets in the state of nature agree, that they are scarcely ever caught, particularly in fummer, which they attribute to their shy disposition. 7. Add to all these, that the Red and Gray Linnets are very fimilar in the rest of their plumage, in their size, in the proportions and shape of their parts, in their fong, and in their habits. And it will be eafy to infer, that if Gray Linnets really do exist, they are either, 1. all females; or, 2. all young males of the year's hatch before October, for at that time they begin to be marked; 3. such as being bred apart from the mothers cannot affume red in the state of captivity; 4. those which being caught lose their tint in the cage\*; . or, lastly, those in which this beautiful colour is effaced by moulting, disease, or some other cause.

The reader will not then be surprised that I refer these two Linners to the same identical species; and consider the gray fort as only an accidental variety, partly effected by education, and afterwards mistaken by authors.

The Linnet often builds its nest in vineyards, and hence it has been called the Vine-Linnet. Sometimes it places its nest on the ground; at other times it fixes it between two props, or

<sup>\*</sup> We must observe that those birds which have had the red spots, but lost them, still retain on the same parts a rusous colour, approaching to red; which never appears in the young that have been bred without the mothers, and that consequently have never been marked with red.

even in the vine itself; it breeds also in juniper, gooseberry, and hazel-nut trees, in young coples, &c. A great number of these nests have been brought to me in the month of May, a few in July, and only one in September: they were all composed of flender roots, small leaves, and moss on the outside, and lined with feathers; hairs, and a great deal of wool. I never found more than fix eggs; that of the fourth of September had only three; they were of a dirty white, spotted with brown red at the large end-The Linnets have seldom more than two hatches, except their eggs be robbed, which obliges them to renew their labours; and in this way they may be made to lay four times in the year. The mother feeds the young by difgorging into their bill what had been prepared and half-digested in her craw.

After the hatching is over, and the family raised, the Linnets go in numerous slocks, which are formed about the end of August, when the hemp is arrived at maturity; and at this time sixty have been caught in one drawing of the net\*, and out of these were forty males. They continue to live thus in society during the whole winter; they sly very crowded, alight and rise together, perch on the same trees, and about the

The lark-net may be used, but it ought to be rather smaller and closer. One or two cock Linnets should be had for calls. Chassinches, and other small birds, are often caught with the Linnets.

beginning of spring they all chant at once; they lodge during the night in oaks, and elms, whose leaves, though dry, have not yet fallen; they are seen too on the linden-trees and poplars, and feed upon the buds; they live also upon all kinds of small seeds, particularly those of thistles, &c. and hence they haunt indiscriminately uncultivated lands, and ploughed fields. Their walk is a fort of hopping; but their slight is continued and uniform, and not like that of the sparrow, composed of a succession of jerks.

The fong of the Linnet is announced by a fort of prelude. In Italy the Linnets of Abruzzo and of the Marche of Ancona are preferred. It is generally supposed in France that the warble of the Red Linnet is superior to that of the Gray. This is consonant to reason; for a bird which has formed its song in the bosom of liberty, and from the impulse of its inward feelings, must have more affecting and expressive airs, than one that has no object but only to cheer its languor, or to give the necessary exercise to its vocal organs.

The females are naturally destitute of song, nor can they ever acquire it. The adult males caught in the net profit as little by instruction; and the young males taken out of the nest are alone susceptible of education. They are fed with oatmeal-gruel, and rape-seed ground with milk or sugared-water; and in the evening they are whistled to in the weak light of a candle,

care being taken to articulate distinctly the words which they are wanted to repeat. Sometimes, to begin them, they are held on the finger before a mirror, in which they view their image, and believe they see another bird of their own species; they soon fancy that they hear the notes of a companion, and this illusion produces a fort of emulation which animates their songs, and quickens their progress. It is supposed that they sing more in a small cage than in a large one.

The very name of these birds points out their proper food. They are called Linnets (Linariæ) because they prefer lint-seed; to this are added. the feeds of panic, of rape, of hemp, of millet, of Canary-grass, of raddish, of cabbage, of poppy \*, of plantain, of beet, and fometimes those of melon bruifed. From time to time they have fweet cake, prickly-forrel, chickweed, fomeears of wheat, oats pounded, and even a little falt; but all these must be properly varied. They break the fmall grains in their bill, and reject the shell; they ought to have very little hemp-feed, for it fattens them too much; and this excessive fat occasions their death, or at least renders them unfit for finging. In thus feeding and raising them one's felf, we shall not only teach them what airs we chuse with a Canarywhiftle: a flageolet, &c. but we shall tame them.

<sup>\*</sup> Gesner says that if poppy-sceds alone be given for food either to Linnets or Goldsinches, they will become blind.

Olina

Olina advises to shelter them from cold, and even to employ remedies for their diseases; that we ought for instance to put in their cage little bits of plaster to prevent costiveness; to which they are subject: he directs oxymel, succory, &c. in cases of asthma, phthisic\*, and certain convulsions, or beatings with the bill. This last, however, I should suppose, is only a kind of careffing; the little animal, overcome by inward workings, makes the most violent efforts to communicate its fentiments. At any rate we must attend much to the choice and quality of the grain that is given if, and observe great cleanliness in its food, drink, and volery; when fuch care is taken, the bird may live in confinement five or fix years, according to Olina; and much longer according to others †. They diftinguish those who are kind to them, become fond of them, alight on them out of preference, and behold them with an affectionate air. we would abuse their docility, we might even make them draw water; for they acquire habits as readily as the Siskin and Goldfinch. They begin to moult about the dog-days, and fometimes much later: a Linnet and a Siskin have been known not to drop their feathers be-

<sup>\*</sup> The captive Linnets are also subject to the epilepsy, and the boil. Some say that they can scarcely ever be cured of this boil; others direct to puncture it scasonably, and pour wine into the wound.

<sup>†</sup> There is one at Montbeillard that is certainly known to be feventeen years old.

fore October; they had fung till that time, and their music was superior to that of any other bird in the same volery; and their moult, though late in the season, was expeditious and easy.

The Linnet is a pulverulent bird, and it would be proper to strew in the bottom of the cage a layer of fine fand, and renew it occasionally; there ought also to be a small bath.—The total length of the bird is five inches and a few lines; its alar extent nearly nine inches; its bill five lines; its tail two inches, somewhat forked, and stretching an inch beyond the wings.

In the male the top of the head and the breast are red; the throat, and the under-part of the body, rusty-white; the upper-part, chesnut; almost all the feathers of the tail and of the wings are black, edged with white; and hence when the wings are closed there is a white ray parallel to the feathers. The female has commonly none of the red that we have mentioned; and the plumage is more varied than in the male. [A]

<sup>[</sup>A] The two, kinds of Linnets which Buffon conceives to be originally the same, are distinguished by systematic writers:—

<sup>1.</sup> The Common Linnet, called sometimes the Gray Linnet. It is the Fringilla Linota of Gmelin; the Linaria of Ray, Williaghby, Brisson, Frisch, &c. The German name is Flacks-Finch, that is Flax-Finch; the Italian, Fanello; the Dutch, Knue; the Brabantish, Vlasvinch; the Turkish, Gezegen. Aristotle termed it Ary Gos. The character given by Brisson is:—" It is of a dusky chesnut, and beneath tawny white; its wings are marked by a longitudinal white stripe; its tail-quills are black, edged with white." In the beginning of the spring the breast of the male is of a rose-crim-

fon colour, which does not take place in the female. It builds its nest with moss and bents, and lines it with wool and hair; lays five eggs.

2. The Greater Red-headed Linnet, or Red-Poll, which Buffon terms The Greater Vine-Linnet. It is the Fringilla Camabina of Linnæus, or the Hemp-Finch; the Linaria Rubra of Gesner, Ray, Brisson, &c. The German name is Hänsling, or Hemp-bird; and the Italian Fanello Marino, or Sca-Linnet. It is thus characterized by Brisson:—" It is of a dusky chesnut, the margins of its sca-" thers more dilute, and beneath of a tawny-white; its wings marked with a white longitudinal stripe; its tail-quills black, the whole of their borders white." The Linnæan character:—" The primary quills of its wings, and those of the tail, black, and white at both the edges." It is sound both in Europe and in America. It is smaller than the preceding, and is gregarious in winter. The semale has neither the red spot on the crown, nor the blush-coloured breast. It nesses on the ground. It is a very samiliar bird, and quite cheerful a few minutes after it is caught.

The opinion of our ingenious author with respect to the identity of the species of the Red Poll, and of the Common Linnet, is very plausible; but it seems not altogether well founded. The Red Poll is smaller than the Linnet; it nestles on the ground, while the latter breeds in surze and thorn-hedges. The egg of the Linnet is of a very faint blue, dotted with rusty specks, and interspersed with minute brown streaks. The egg of the Red Poll is a very faint green, sprinkled with rusty dots, and rather sharp at the small end.

# VARIETIES of the LINNET.

I. THE WHITE LINNET. I have feen this variety at the house of Desmoulin, the painter. White was the predominant colour of its plumage, but the quills of the wings and of the tail were black, edged with white, as the Common Linnet, and some vestiges of gray also were perceptible on the upper coverts of the wings.

II. THE BLACK-LEGGED LINNET. Its bill is greenish, and the tail much forked; in other respects, it is the same in size, in proportions, and even in colours, with the common Linnet. This bird is found in Lorraine, and we are indebted for our information to Dr. Lottinger of Sarbourg.

 $\mathbf{M}$ 

# The STRASBURG FINCH.

Le Gyntel de Strasbourg, Buff. Fringilla Argentoratensis, Gmelin, Linaria Argentoratensis, Briss.

Little is known with regard to this bird, yet enough to indicate its affinity to the Linnet, It

is of the same size, it feeds upon the same feeds, it flies also in numerous flocks, and has eggs of the same colour: its tail is forked, the upper-part of its body of a deep brown, the breast rufous, speckled with brown, and the belly white. It lays indeed three or four eggs only, according to Gefner, and its legs are-red. But was Gefner accurately acquainted with the number of eggs? and with regard to the red colour of the legs, we have feen, and we shall have other oppor-, tunities of being convinced, that this property is far from being foreign to Linnets, especially to those in their natural state. The analogy appears even amidst the differences, and I am inclined to believe, that when the Strafburg Finch is better known, it may be referred as a variety derived from climate, fituation, &c. to the common Linnet \*.

<sup>\*</sup> Specific character:—" It is dufky, above rufous, spotted with dufky, its lower belly and vent whitish." It is thus defcribed by Brisson; "above it is dufky, below rufous, variegated with dufky spots, its lower belly whitish, its tail-quills dufky, its legs reddish."

# The MOUNTAIN LINNET.

La Linotte de Montagne, Bust. Ringilla Montium, Gmel. Linaria Montana, Briss.

This bird is found in the mountainous part of Derbyshire in England \*: it is larger than the ordinary fort, and its bill proportionally more flender. The red, which appears on the head and breast of the common cock Linnet, occurs in the male of this species on the rump. other respects the plumage is nearly the same. The breast and throat are variegated with black and white; the head with black and cinereous, and the back with black and rufty. The wings have a transverse white ray, which is very distinct, being on a black ground; it is formed by the great coverts which are tipt with white. The tail is two inches and a half long, composed of twelve brown quills, of which the lateral ones have a white edging, which is broader the nearer the quill lies to the outfide.

It is probable that the Mountain Linnet has a forked tail, and that its warble is pleasant, though

<sup>\*</sup> May not this be the fecond Linnet' mentioned by Gesner, and after him by Schwenckfeld, which is more shy than the common Linnet, has an inferior song, and inhabits arid mountains, at least if we judge from the name that he gives it, Stein Haënsling (Stone Linnet)?

Willughby does not expressly mention these circumstances. But he reckons these two characters peculiar to the Linnet, with which he ranges it. If we be permitted to draw this inference, we might consider the Mountain Linnet as only a variety resulting from climate or situation. [A]

[A] The Mountain Linnet advances during the winter in flocks to the fouthern parts of England, and perhaps breeds in the northern counties. It is larger than the Red Poll, being fix inches and a half long. Specific character:—" It is black, below pale, "the throat and breast blackish, the rump in the male pale-red." Thus described by Brisson:—" Above, it is black and variegated "with tawny, below whitish; the feathers of the lower part of the neck and of the middle of the breast are black, (the rump red in the male,) with a white transverse stripe; the quills of the tail dusky, the edges of the lateral ones white on both edges." Its egg resembles that of the common Linnet in colour, but the specks are thinner scattered, and its shape is rather more bulged.

M

# The TWITE.

Le Cabaret, Buff.
Fringilla Montium, Var. Linn.
Linaria Minima, Briss.
Linaria Pectore Subluteo, Klein.
Fanello dell' Aquila, Olia.

When we treat of birds whose colours are so variable as in the present, we should fall into numberless mistakes, if we considered them as specific characters. We have already feen that

the

the common Linnet, in the state of liberty, was marked with red on the head and breast; that the captive Linnet had the same colour only on -the breast, and that concealed; that the Strasburg Linner had it on the legs; and that the Mountain Linnet was painted with it on the rump. Brisson says, that what he calls the Little Vine Linnet is red on the head and breast: and Gesner adds, on the rump. Willughby mentions a small Linnet which had a red spot on the head, and in that circumstance resembled the two described by Aldrovandus, though it differed in other respects. Lastly, the Cabaret of Brisson was marked with red on the head and rump, but that of Frisch had none on the head. It is obvious, that a great part of these varieties is owing to the seasons and the circumstances in which these birds have been feen. If in the middle of fpring, they were clothed in their richest colours; if during the moulting season, the red had disappeared; if immediately after, it was not yet resumed. they were kept in a cage, the change would be in proportion to the length of their confinement; and as the feathers of the different parts of the body would drop at different times, there would be abundant fource of diversity. In this uncertainty, we are obliged, in order to determine the species, to recur to the more permanent properties; the shape of the body, the instincts, and habits. Applying this method, I can perceive only two kinds of birds that have received the name of Little Linner: the one, which
never fings, appears but once in fix or seven
years, arrives in numerous flocks, refembles the
Siskin, &c.: it is the Little Vine Linner of Britson: the other is the Twite of this article.

The younger Daubenton had for two or three years one of these birds, which was caught in a net. It was at first very shy, but it became gradually reconciled, and grew quite familiar. It feemed to prefer hemp-feed for its food. It had a fweet mellow note, much like that of the Hedge Pettychaps. It lost all its red the first year, and never recovered it; the other colours suffered no alteration. When fick or in moult, its bill was obferved to become immediately pale and yellowish; and as the bird recovered, it passed through all the shades to its proper brown cast. male is not entirely destitute of brilliancy of plumage; it is marked with red on the head, but not on the rump. 'Though smaller than the common hen Linnet, its voice is stronger and more varied. This bird is rare both in Germany and in France. It flies rapidly, but never in large flocks; its bill is rather more flender in proportion than that of the common Linnet.

Measures: the total length of the Twite is four inches and a half; its wings are eight inches across; its bill rather more than four lines; its tail two inches: this is forked, and projects only eight lines beyond the wings.

Colours:

Colours: The upper-part of the head and the rump are red; there is a reddish bar under the eyes; the upper-part of the body is variegated with black and rust colour; the under-part of the body rusty, spotted with blackish below the throat; the belly is white; the legs brown, sometimes black. The nails are very long, and that of the hind toe is longer than the toe itself. [A]

[A] Linnaus makes the Twite a variety of the Mountain Linnet; but Mr. Latham conceives it to be more related to the Red Poll. "It is variegated above, rufous below, the abdomen " whitish, the eye brows and the bar on the wings tawny, the " crown and rump red." It is about four inches and a half long. Brisson describes it "as blackish above and varied with rusous, " below tawny; the belly whitish; the stripe above the eyes ru-" fous; having spots between the bill and the eyes and under the " throat of a duky blackish colour, the crown and rump red in the " male; (the crown red in the female;) the transverse bar on " the wings of a white-rufous; the tail-quills dusky, the whole " of the edges tawny." If we were to judge from the egg of the Twite, we should regard it as a variety of the Red Poll. The egg of the Twite, though rather smaller than that of the Red Poll, is of the same shape and colour; only the dots are orange, smaller, and more thickly spread.

# FOREIGN BIRDS,

T.

# The VENGOLINE\*.

All that is known with regard to the history of this bird is, that it is found in the kingdom of Angola; that it is very familiar; that it is ranked among the finest warblers of that country; and that its song is not the same with that of our Linnet. The neck, the upper-part of the head and of the body, are variegated with two sorts of brown; the rump has a beautiful spot of yellow,

<sup>\*</sup> This name was applied to it by Mr. Daines Barrington. the Angola Finch of Latham, the Fringilla Angolensis of Gmelin, and the Linaria Angolensis of Brisson. " It is dusky-cinereous spotted with dusky, below orange, the throat and the fore-head black, " the cheeks and throat spotted with white, the rump yellowish." Brisson describes it : MALE; "Tawny-cincreous above, variegated with dufky fpots; scarlet below; the throat lighter colour-" ed; the small feathers round the base of the bill and on the " throat black; the cheeks and throat leatted with white; the " rump yellowish'; the tail feathers dusky, eaged with cinereous " white." FEMALE; -" Tawny-cinercous above, rufous with " dufky spots below, and variegated both above and below; a of dusky stripe stretching on either side over the eyes; the cheeks " light tawny; the rump whitish; the tail scathers dusky, edged with cinercous white." which

which extends to the quills of the tail: these quills are brown, edged and tipt with light gray, as who he quills of the wings, and their great and middle coverts. The sides of the head are of a light fust colour, and there is a brown streak below the eyes; the under-part of the body and the sides are spotted with brown on a lighter ground.

Edwards, who first described this bird, and who has given a figure of it at the bottom of Pl. 129, is inclined to think it is a female of another that is represented at the top of the same plate. Thisother bird is called Negral or Tabaque, and its fong is much like that of the Vengoline. For my own part, I must confess, that the fong \* of this makes me doubt of its being a female. I should rather suppose that they are two males of the same species, but from different climates, where each would have a distinct name; or at least that they are two males of the fame climate, one of which being bred in a volery, had loft the luftre of its plumage, and the other not being caught before it was adult. or having been kept but a short time in the cage, had preserved its colours better. In fact the colours of the Negral are richer and more marked than those of the Vengoline. The throat. 'the face, and the streak below the eyes, are black;

<sup>\*</sup> Daines Barrington fays, that the Vengoline excels in point of long all the birds of Asia, Africa, and America, except only the American Mocking Bird.

part of the body of an orange colour, without specks, and which assume a deeper that under the belly and the tail. These two tards are as the size of our Linnet; and Edwards adds, that they have the same aspect.

IVA

#### II.

# The GRAYFINCH\*.

La Linotte Gris-de-Fer; Buff.
Loxia Cana, Linn.
Fringilla Cinerea Indica, Briff.
Cinereous Großeak, Lath.

We are indebted to Edwards for the knowledge of this bird, who had it alive, and has given a figure and description of it, without informing us from what country it came. Its warble is very pleasant. It has the gestures, the size, the shape, and the proportions of the Linnet, only its bill is rather stronger. The under-part of its body is of a very light ash-colour, the rump rather darker; the back, the neck, and the upper-part of the head iron-gray; the quills of the tail and of the wings blackish, edged with

<sup>\*</sup> Specific character:—" Hoary, the feathers of the wings and of the tail dusky, the legs red."

light cinereous, except the longest quills of the wings, these being entirely black near the entrand white at their origin; which gives the wings a white border in its middle-part. The lower mandible is encircled at its base with white, and this colour extends as far as the eyes.

M

#### III.

#### The YELLOW-HEADED LINNET.

La Linotte à tête jaune, Buff. Loxia Grisea, Gmel. Passer Mexicanus, Briss. Emberiza Flava Mexicana, Klein.

Edwards knew that this bird was called by fome the Mexican Sparrow\*, and he has ranged it with the Linnets, because it is more related

\*Specific character:—"Corulean gray, face and lower-part of the neck white." Thus described by Brisson:—"Above dirty coloured, varied with black spots, below slightly dusky with dull spots, and variegated with dusky spots; the fore-part of the head, the checks and the throat yellowish; a dusky longitudinal bar behind the eyes; the tail-quills blackish."

Dr. Fermen, in as description of Surinam, mentions a Linnet with a vellow ibroat and bill, the rest of the plumage being cinereous. "It haunts the Savannas, and is larger than a Sparwow.". Its song is not so pleasant as to deserve to be kept in a cage, but it is reckoned as a fort of Ortolan, because it is delicate cating.

that it also bears some analogy to the Canaries and we might place it with the Habesh derived the Linnets and Canaries; but the obscurity of its history renders it more difficult to affign it the proper rank.

It is of a pale flesh colour, the feet of the fame, but duskier; the fore-part of the head and throat yellow, and upon this yellow ground there is a brown bar on each fide of the head, rising from the eye and descending on the sides of the neck; all the upper-part of the body is brown, but deeper on the quills of the tail than any where else, and sprinkled with lighter spots on the neck and back; the lower-part of the body is yellowish, with brown longitudinal spots scattered thinly over the belly and breast.

This bird was brought from Mexico. Brisson fays that it is nearly of the fize of the Brambling; but if we judge by the figure which Edwards gives from the life, it must be thicker\*.

<sup>\*</sup> La Linotte-Brune of Buffon, the Fringilla Atra of Gmelin, and the Fringilla Objeura of Latham. "It is of a blackish dusky colour, the breast and rump cincreous, the feathers lighter on its crown." It inhabits Angola, and is four inches long.

#### IV.

# The DUSKY FINCH.

Our knowledge of this bird is drawn from Edwards. Almost all its feathers are blackish, edged with a lighter colour, which has a reddish cast on the upper-part of the body: the general colour that results from this mixture is deep brown, though varied. It has a cinereous tint on the breast and rump; the bill is also cinereous, and the legs are brown.

I presume that Brisson ought not to confound this bird with the Little Brown Sparrow of Catefby, whose plumage is of an uniform brown, without any moulting, and therefore quite different. But the difference of climate is still greater; for Edwards's Dusky Linnet came probably from Brazil, perhaps even from Africa; whereas Catesby's Little Brown Sparrow is found in Carolina and Virginia, where it breeds and continues the whole year. Catesby tells us, that it lives upon insects, that it is almost always alone, that it is not very common, that it visits inhabited places, and that it is constantly hopping among the bushes. We are not acquainted with the habits of the Dusky Linnet.

# The MINISTER

Le Ministre, Buff.
Tanagra Cyanea, Linn.
Emberiza Cyanea, Gmel. and
Tanagra Carolinensis Carulea, Brist.
Blue Linnet, Edw.
The Indigo Bunting, Penn. and Lath.

Carolina bird, which others call the Bishop, but which must not be confounded with the Bishop of Brazil, which is a Tanagre. I place it near the Linnets, because in the time of moulting it is so much like these, as to be mistaken for them, and the semale at all seasons resembles them. The moult happens in the months of September and October; but the period varies as in Buntings, and in many other birds: the Minister is said even to drop its seathers thrice a-year, in which circumstance it also resembles the Buntings, the Bengals, and Senegals, &c.

When clothed in its finest attire, it is sky-blue upon a violet ground; the vane of the wings is of a deep blue, with deep brown in the male, and with a greenish tint in the female; which is sufficient to distinguish it in the moulting sea-

Its specific character:—" It is azore, deeper coloured to the crown, the quills of the wings and of the tail dulky, and edged with coerulean." It seems to be extremely like the Painted Bunting. Emberiza Ciris of Linnæus.

fon from the male, whose plumage is in other grafaects pretty like that of the semale.

The Minister is of the size of a Canary-sinch, and, like it, lives upon millet, and the seeds of Canary-grass, &c.

Catesby figures this bird by the name of the Blue Linnet\*, and tells us that it is found among the mountains in Carolina, at the distance of one hundred and fifty miles from the sea; that its wings are nearly like the Linnet; that the feathers of its head are of a deeper blue, and those of the under-part of the body of a lighter blue; that the quills of the tail are of the same brown with those of the wings, with a light tinge of blue; and lastly, that the bill is blackish and the legs brown, and that it weighs only two ounces and a half.

Its total length five inches; its bill five lines; the tarfus eight or nine lines; the middle toe fix lines and a half; the tail two inches, and extends ten or twelve lines beyond the wings.

<sup>\*</sup> The Spaniards call it Azul Lexos, or the far-fetched bird, as it comes to Mexico from the back parts of Carolina. It is smaller than the Goldsinch, and has the song of the Linnet. It appears in the state of New York about the beginning of summer. It builds in the fork of a branch with dry yellow grass, and lines the nest with the down of plants.

# The BENGALS, and the SENESALS.

Les Bengalis, et les Senegalis ,

A L. travellers, and after them the naturalists, have agreed, that thefe finall birds change their colours in moulting. Some even add interesting particulars which we should wish to ascertain; that the varieties of plumage are confined entirely to five principal colours, black, blue, green, yellow, and red; and that the Bengals never assume more than one at a time. Yet persons who have had an opportunity of observing these birds in France, and of watching their alterations for a course of years, affert that they have only one annual moult, and never change their colour †. This apparent contradiction may be explained by the difference of climates. of Asia and Africa, the native regions of these birds, is more powerful than ours, and may have greater influence upon their plumage. But the Bengals are not the only birds which undergo the change; for, according to Merolla, the Sparrow in Africa becomes red in the rainy feafon,

<sup>\*</sup> Some of them are termed the Senegal Sparrous.

<sup>†</sup> M. Mauduit, well known for his enlightened taffe in Research History, and for his excellent collection of birds, observed a Red Senegal that lived more than a year without changing his plumage. Château says the same of all the Bengals which passed through his hands.

At any rate, an arrangement founded on the co-puts of the plumage must in the present case betotally uncertain; since, in their native climate, at least, these pretended characters would only be momentary, depending on the season when the birds was killed. On the other hand, their complexion, which sluctuates in Africa and Asia, is invariable in Europe; and it becomes difficult to avoid compounding varieties with species. I shall follow therefore the received opinions, and allot a separate article to each bird which appears obviously distinct, but without pretending to decide the number of real species, which can be only the work of time.

We should be much mistaken if we inferred from the names of these birds, that they are confined to Bengal and Senegal: they are spread through the greatest part of Asia and Africa, and even in many of the adjacent islands, such as those of Madagascar, Bourbon, France, and Java, &c. We may even expect soon to find them multiplied in America; for De Sonini lately set at liberty a great number of them in the Isle of Cayenne, and afterwards saw them cheerful and lively, strongly disposed to naturalize in a foreign soil, and perpetuate their race \*. We may hope that these new colonists, whose plussage is so variable, will also suffer the influ-

. \_

<sup>\*</sup> A few years ago a Red Senegal was killed at Cayenne in a favanna; it had certainly been carried thither by some navigators.

ence of an American climate, and other varieties will be produced, more fit however to decorate our cabinets than to enrich Natural History.

The Bengals are familiar and destructive birds:
in a word, they are real Sparrows. They visit
the houses and even appear in the middle of the
villages, and alight in numerous bodies in the
fields sowed with millet \*; for they prefer this
grain: they are also fond of bathing.

In Senegal, they are caught under a calebash, or large gourd, which is placed upon the ground, and raised a little by a short prop, to which a long cord is fastened; a sew grains of millet serve for the bait. The person who watches their motions without being perceived, draws at the proper time, and secures whatever is under the calebash; Bengals, Senegals, and small black Sparrows with white bellies, &c. † These birds are transported with difficulty, and can hardly be reconciled to a different climate; but when once naturalized, they live six or seven years, that is longer than many species proper to the country. They have even bred in Holland; and the same success would undoubtedly be had

. . .

<sup>\*</sup> Travellers inform us, that the negroes ear certain small birds entire with their feathers, and these birds resemble Linnets. I imagine that Senegals are of the number, for some Senegals in the time of moulting are like Linnets. Being it is said that the negroes eat the small birds entire, only to retaliate no the damage done among their crops, these neitling in the midst of the sowed fields.

<sup>+</sup> I owe the detail of this sport to M. de Sonini,

in colder places; for these birds are very gentle and social, and often caress each other, and above all, the males and semales sit near one another, and sing in concert. It is added, the song of the semale is not much inferior to that of the male.

M

# The BENGAL.

Le Bengali, Buff.

Fringilla Bengbalus, (mas.) Linn.

Fringilla Angolensis, (fem.) Id.

The Blue-bellied Finch , (fem.) Edw. and Lath.

As the instincts and habits are nearly the same in the whole of this samily of birds, I shall content myself, in this and the following articles, to subjoin to the general account, the delineation of the peculiar features of each. In cases such as the present, where the principal object is to convey ideas of the richness and variety of the plumage, we ought to quit the pen for the pencil; at least, we must imitate the painter in describing not only the forms and lineaments,

The specific character:—" Light corulean, head and back of grant in five softhe head purple." Brisson describes it:—" Gray above, light corulean below; a purple spot below the eyes; the rump and tail seathers light corulean." Bird-sanciers call it Mariposa.

but in representing the sportive fluctuation of tints, their changing succession and combination, and above all in expressing action, motion, and life.

The Bengal has on each fide of its head a fort of purple crescent which lies under the eyes, and marks the physiognomy of this little bird.

The throat is light blue, and the same colour spreads over all the lower parts of the body, as far as the end of the tail, and even over the upper coverts. All the upper-part of the body, including the wings, is of a pleasant gray.

In some individuals, this same gray, somewhat lighter, is the colour of the belly and of the lower coverts of the tail.

In other specimens brought from Abysfinia, this gray had a tinge of red on the belly.

Lastly, in others there is no purple crescent under the eyes; and this variety, known by the name of Blue Cord\*, is more common than that first described. It is said to be a semale; but, as it is so frequent, I should rather suppose that the appearance is owing to the difference of age or climate. Mr. Bruce, who has seen this bird in Abyssinia, positively assures us, that the two red spots are not found in the semale, and that all her colours are less brilliant. He adds, that

<sup>.</sup> Cordon Bleu, Knight of the order of the Holy Ghost.

the male has an agreeable warble, but he never remarked that of the female: in both, the bill and the legs are reddifh.

Edwards has figured and coloured a Blue Cord (the Blue-bellied Finch) which was brought from the coast of Angola, where the Portuguese called it Azulinba. It differed from the preceding; the upper-part of the body being of a brown cinereous, flightly tinged with purple, the bill of a deep flesh colour, and the legs brown. The plumage of the female was of a cinereous brown, with a flight tinge of blue on the lower-part of the body only. It would seem to be a variety from the climate, in which neither fex has the red fpot under the eyes; and this accounts for the frequency of the Blue Cords. It is a very lively bird. Edwards remarks that its bill is like that of the Goldfinch. He takes no notice of its fong. not having an opportunity of hearing it.

The Bengal is of the fize of the Sizerin; its total length is four inches nine lines; its bill four lines; its tail two inches, unequally tapering, and confishing of twelve quills; its extent fix or seven inches.

#### The BROWN BENGAL\*.

Brown is the predominant colour of this bird; but it is more intense under the belly, and mottled on the breast, with whitish in some individuals, and reddish in others. All the males have some of the upper coverts of the wings tipt with a white point, which produces a speckling, confined however to that sex; for the semale is of an uniform brown without spots. In both the bill is reddish, and the legs of a light yellow.

The Brown Bengal is nearly the fize of a wren; its total length is three inches and three-fourths; its bill is four lines; its alar extent about fix inches and a half; and its tail rather more than an inch.

Latham reckons this bird a variety of the Punctured Bengal, Fringilla Amandava, Linn. of the following article. Brisson terms it Bengalus Fuscus, or Dusky Bengal, and describes it as "having the throat and breast mixed with dirty whitish; the upper coverts of the wings dotted with white; the quills blackish."

N.º89

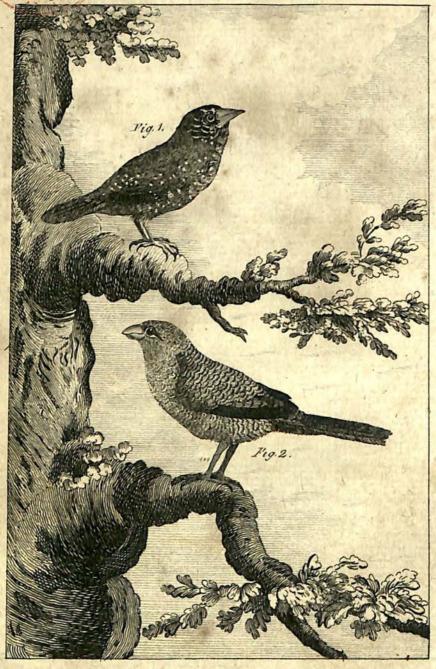


FIG1 THE ANADUVADE FIG2 THE SENEGAL FINCH

# The PUNCTURED BENGAL\*.

Le Bengali Piqueté, Buff.
Fringilla Amandava, Linn.
Fringilla Rubra Minima, Klein.
Bengalus Punitularus, Briff.
The Amaduvade Finch, Will. Alb. Edw. and Lath.

Of all the Bengals which I have seen, this is the most speckled. The whole upper part of the body, the superior coverts of the tail and wings, and the quills of the wings next the back, were sprinkled with points; the wings were brown, and the lateral quills of the tail black, edged with white. Brown mixed with a dull red was spread over all the upper part of the body, including the coverts of the tail, and even under the belly; a red not so dusky extended over all the rest of the under-part of the body, and the sides of the head; the bill was also of a dull red, and the legs of a light yellow.

The female, according to Brisson, is never punctured; it differs also from the male, as its neck, breast, and belly, are of a pale-yellow, and the throat white. According to other observers, who had many opportunities of

<sup>\*</sup> Specific character:—"Dusky and tawnyish, speckled with white; "the tail-quills black, with a white point at their tip." Brisson's description:—"Dusky above, mixed with dull red, below faintly "red; the upper coverts of the wings and of the tail, the breast, and the sides, sprinkled with white points; the feathers of the wings black."

repeatedly feeing these birds alive, the female was entirely brown, and without fpots. Is this a variety of plumage, or a difference of description? for the latter is no small source of confufion in natural history. Willughby saw several of these birds which came from the East Indies, and, as we may expect, found several differences among the individuals; fome had black wings; in others the breast was of that colour; in others the breast and belly were blackest; in others the legs whitish: in all the nails were very long, and more incurvated than those of There is reason to believe that some the lark. of these birds were in moult; for I observed one in which the lower-belly was blackish, and all the rest of the plumage indecided, as happens when the feathers are dropped, the colours peculiar to the species being impressed, but not well discriminated...

The specimen described by Brisson came from the island of Java. Those observed by Charleton were brought from India; their warble was very pleasant; several of them were kept toge-, ther in the same cage, because they disliked the society of other birds.

The Speckled Bengal is of a fize intermediate to the two preceding; its total length is about four inches; its bill four or five lines; its extent less than fix inches; its tail an inch and four lines, unequally tapered, and confishing of twelve quills.

# The SENEGAL\*.

Le Senegali, Buff. Fringilla Senegala, Linn. Senegalus Ruber, Briff. The Senegal Finch, Lath.

THERE are two principal colours in the plumage of this bird; vinous red on the head, on the throat, and on all the under-part of the body as far as the legs, and on the rump; a greenish-brown on the lower belly and on the back, where it receives a slight tinge of red. The wings are brown, the tail blackish, the legs gray, the bill reddish, except the upper and lower ridge, and its edges, which are brown, and form a fort of red-coloured squares.

This bird is somewhat smaller than the Punctured Bengal, but longer shaped. Its total length is four inches and a few lines; its bill sour lines; its alar extent six inches and a half; its tail eighteen lines, consisting of twelve quills.

<sup>\*</sup> Specific character: — Dusky ferruginous; rusous on the head, and under; the bill red, streaked with black."— It is greenished dusky above, mixed with wine colour, and below of a red wine colour; the crown red wine; the lower belly greenish-dusky; the quills of the wings black." Brisson. Some have given it the mame of Ruby, on account of its colour.

#### VARIETIES of the SENEGAL.

I. I have seen one of these birds which had been killed in Cayenne in a savanna, and the only one that has been seen in that country. It probably had been carried thither by some curious person, and had escaped from its cage. It differed in some respects from the preceding; the coverts of its wings were slightly edged with red; the bill was entirely of that colour; the legs only reddish: and what shews the close analogy between the Bengals and Senegals, the breast and sides were sprinkled with some white points.

II. The DANBIK of Mr. Bruce. This bird is very common in Abyssinia, and partakes of the qualities of the two preceding. It is of the same size. The red colour, which is spread over all the anterior part, does not descend to the legs, as in the Senegal, but it extends over the coverts of the wings, where a few white points are perceived likewise on the sides of the breast. The bill is purple, its upper and lower ridge bluish, and the legs cinereous. The male sings agreeably. The female is of an almost uniform brown, and has very little purple.

# The RADIATED SENEGAL\*

Le Scnegal Rayé, Buff.
Loxia Astrild, Linn.
Fringilla Undulata, Pall.
Senegalus Striatus, Briss.
Waxbill Grosheak, Edw. and Lath.

It is radiated transversely as far as the end of the tail with brown and gray, and the strice are the more delicate as they are nearer the head. The general complexion is much lighter on the lower part of the body; it is also shaded with rose-colour, and there is a red oblong spot under the belly; the lower coverts of the tail are black without any rays, but some traces can be perceived on the wing-quills, which are brown; the bill is red, and there is a stripe, or rather a bar of that colour on the eyes.

I have been assured that the female is exactly like the male; but the differences which I have myself observed in many individuals, and those which have been noticed by others, create some

Linnaan specific character:—"Gray, waved with dusky; the bill, orbits, and breast, saffron-coloured."—"It is streaked transversely with dusky and dirty gray, mixed with rose-colour in the lower part of the body, and with red on the belly; a red stripe near the eyes; the quills of the wings streaked transversely in with dusky and dirty gray." Brisson.—It is called Waxbill on account of the colour of its bill. Some have consounded it with the La-ki of China, to which many marvellous properties are imputed; but that bird is as large as a blackbird, and bears no relation to the Senegals,

doubts of the perfect similarity of the fexes. have feen feveral which came from the Cape, in some of which the upper-part of the body was\_\_\_ moré or less of a deep brown, and the under more or less reddish; in others the upper-part of the head had no rays. In that figured by Edwards, Pl. 179, 'the rays confisted of two browns; and the coverts below the tail were not black, which is also the case with what we have represented No 157, fig. 2. Lastly, in the specimen delineated at the top of Pl. 354, the rays of the under-part of the body are spread upon a brown ground; and not only the lower coverts of the tail are black, as in that described by Brisson, but the lower belly is of the same colour.

The subject observed by Brisson came from Senegal. The two which Edwards examined were brought from the East Indies; and most of those which Frave seen were brought from the Cape of Good Hope. Among so many differences of the plumage remarked between these, some must depend upon the distinction of sex.

The average length of these birds is about four inches and a half; the bill is three or four lines; the alar extent six inches, and the tail two inches, unequally tapered, and composed of twelve quills.

M

#### The SEREVAN.

Brown is the predominant colour of the head, the back, the wings, and the quills of the tail; the under-part of the body is light gray, sometimes a light fulvous, but always tinged with reddish; the rump is red, and also the bill; the legs are red; sometimes the base of the bill is edged with black, and the rump sprinkled with white points, and so are the coverts of the wings. Such was the Serevan sent from the Isle of France by Sonnerat, under the name of Bengal.

That called Serevan by Commerson had all the under-part of the body of a light fulvous; its legs were yellowish; and neither its bill norits rump was red, and not a single speck could be seen on it. Probably it was young, or was a female.

Other birds closely related to this, and fent by Commerson, under the name of Cape Bengals, had a more distinct red tinge before the neck, and on the breast; in general their tail was longer in proportion.

They are all nearly of the fize of the Bengals and Senegals.

M

#### The LITTLE SENEGAL SPARROW.

The bill and legs are red, and there is a streak of the same colour on the eyes; the throat, and the sides of the neck, are of a bluish white; all the rest of the under-part of the body is white, mixed with rose-colour of greater or less intensity; the rump of the same; the rest of the under-part of the body blue; the upper-part of the head is of a lighter blue; the wings, and the scapular seathers, brown; the tail blackish.

This Little Sparrow is nearly the fize of the preceding.

#### The MAIA\*.

Le Maia, Buff.

Fringilla Maia, Linn. Gmel. Briff. and Will.

The Cuba Finch, Lath.

These are very destructive little birds. They assemble in numerous flocks to feed among the crops of rice; they consume much, and waste

It is four inches and three-fourths long.

<sup>\*\*</sup> Specific character:—" Purplish, with a stripe on the breast of a deeper colour."—Briston's description:—Male. " Chesnut purple above, blackish below; head and neck blackish; transverse stripe on the breast of a chesnut purple; the wing-quills chesnut-purple above, and dusky verging on rusous below." Female. "Fulvous above, of a dirty yellowish white below; the throat, and a spot on either side the breast, of a chesnut-purple; the wing-quills sulvous."





THE CUBA FINCH

more; they prefer the countries where that grain is cultivated, and might claim with the *Paddas* the appellation of *Rice-birds*: however, I retain their proper name, by which, as Fernandez informs us, they are known in their native climate. The fame author fays, that their flesh is good, and easy to digest.

In the male, the head, throat, and all the under-part of the body, are blackish; the under of a purple chesnut, brightest on the rump; there is also on the breast a broad cincture of the same colour; the bill is gray, and the legs lead-coloured.

The female is fulvous above, and dirty white below; its throat is purple-chesnut, and on each side of the breast is a spot of the same colour, corresponding to the cincure of the male; its bill is whitish, and its legs are gray.

Fernandez mentions as a wonder, that the stomach of the Maia is behind its neck; but if he had noticed the small birds that are fed, he would have perceived that this wonder is very common; and that as the craw is filled, it is pushed to the place where it meets with least relistance, often on the side of the neck, and sometimes behind it: lastly, he would have seen that the craw is not the stomach.—Nature is always admirable, but we ought to know how to admire her.

M `.

#### The MAIAN\*.

Le Maian, Buff.
Loxia Maia, Linn. Gmel. and Briff.
The Malacca Grosbeak, Edw.
The White-headed Grosbeak, Lath.

China is not the only country from which this bird is brought; that engraved by Edwards came from Malacca, and in all probability it might be found in the intermediate countries. There is reason however to doubt whether it exists in America, and whether so small a bird could trayerfe the immense oceans which disjoin the continents; at least it differs so much from the Maias, the American birds which it the nearest approaches, as to require a distinct In fact its properties are not the same; name. for though it be rather larger, it has its wings and tail somewhat shorter, and its bill as short; befides, its plumage is different, and much inferior in lustre.

In the Majan, all the upper-part of the body is a reddish chesnut; the breast, and all the under-part of the body, is of an almost uniform blackish, not quite so deep beneath the tail; the bill is of a lead-colour; a sort of light gray cowl

<sup>\*</sup> Its specific character:—"Dusky, head white."—"It is above of a dusky-chesnut, below blackish; head and neck dirty white; the breast faintly dusky; the wing-quills of a deep dusky-chesnut." BRISSON.

covers the head, and falls below the neck; the lower coverts of the wings are of the same light gray, and the legs are flesh-coloured.

The Maian of Brisson differs from this; its breast being of a light brown, some of the first feathers of the wings being edged with white, the bill and legs being gray, &c. These differences are too striking to be imputed to the variety of description, especially if we consider the scrupulous accuracy of the describers.

M

## The CHAFFINCH.

Le Pinson, Buff.

Fringilla Cælebs, Linn. and Gmel.

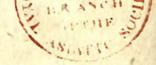
Fringilla, Gesner, Aldrov. and Briss. &c.

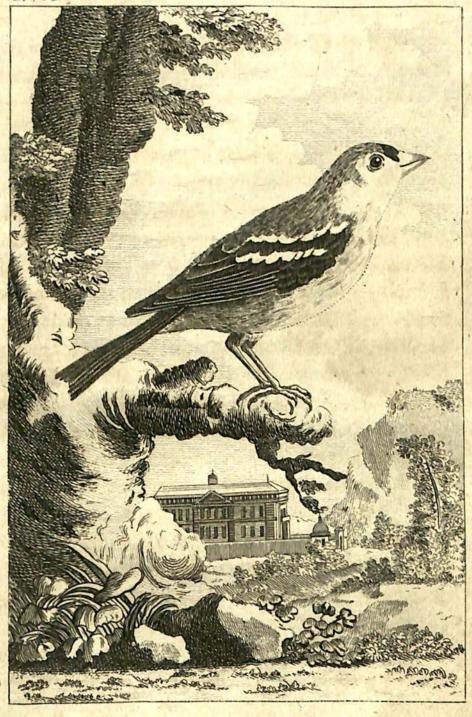
The Snowsseek, or Shoulfall \*, Sib. Scot. Ill.

This bird has great power in its bill, with which it nips so bitterly as to draw blood. Hence, according to the several authors, the French name of *Pinson* is derived (from *pincer*, to pinch). But as the disposition to snap is not peculiar to the Chassinch, but common to other birds, to many different forts of quadrupeds, millepedes, &c. I should rather adopt the opinion of Frisch, who supposes this word *Pinson* to come from *Pincio*, latinized for the German *Pinck*, which seems imitative of the note of the bird.

The Chaffinches do not all migrate in the autumn; a considerable number remains with us during the winter. These resort to our dwellings, and even visit our court-yards to obtain an easier subsistence; they are little parasites, who seek to live at our expence, without contri-

<sup>\*</sup> Aristotle calls the Chassinch Σπίζα: the Italian names are, Franguello, Frangueglio, and Frenguello: in German, Finck, Roth Finck, Winche: in Polish, Slowick: in Swedish, Finke, Bosincke: in Bohemian, Penkewa.





THE CHAFFINCH .

buting to our pleasures: for in that season they never fing, except in fine days, which feldom then occur. During the rest of the time they lodge concealed in close hedges, in oaks that have not shed all their leaves, in evergreens, and even in holes of rocks, where they are sometimes found dead when the weather is excessively severe. Those which migrate into other climates affemble often in prodigious flocks; but whither do they retire? Frisch supposes that their retreat lies in the northern regions: his reasons are; 1. That on their return, they bring with them white Chaffinches, which are hardly to be met with, except in those climates; 2. That they' never lead young ones in their train, which would be the case, if, during their absence, they lived in a warm country, where they might be disposed to breed; 3. That they can bear cold, except fnow, which covering the fields, deprives: them in part of their subsistence \*.

These arguments imply therefore, that there is a country in the north where the earth is not robed in the winter; and such is said to be the

<sup>\*</sup> Frisch.—Aldrovandus says, that in Italy, when there is much snow and the frost very intense, the Chassinches cannot fly, and are caught by the hand; but this weakness may arise from inantion, and that again from the abundance of snow. Olina alleges, that in the same country the Chassinches retire to the hilly tracts during the summer. Hebert has seen many of them in that season among the highest mountains of Bugey, where they were as common as in the plains, and where they certainly do not remain through the winter.

desarts of Tartary, where the snow falls indeed, but is immediately swept away by the violence of the winds, and extensive tracts laid bare.

A very remarkable circumstance in the migration of the Chaffinches, is what Gesner mentions of those of Switzerland, and Linnæus of those of Sweden: that only the females remove to other climates, and the males reside in the country during the winter\*. But have not these able naturalists been missed by the perfons who informed them, and those deceived by some periodical change in the plumage of the females, occasioned by cold, or other accidents? This explanation feems more fuited to Nature's general plan, and more conformable to analogy, than to suppose that, at a certain fixed term, the females separate from mero caprice, and travel into a distant climate, when their native soil can afford them sublistence

The migrations vary in different countries. Aldrovandus assures us, that the Chassinches seldom breed near Bologna, but almost all depart

<sup>\* &</sup>quot;They quit Switzerland in the winter, particularly the fe"males; for several males are often seen, with not one female."
GESNER. Linnæus positively afferts, that the semale Chassinches leave Sweden in slocks about the month of September, that they direct their course to Holland, and return in the spring to join their males which have wintered in Sweden.

This fingular remark is corroborated by Mr. White, who found that the vast flocks of Chassinches which appear in his neighbour-hood about Christmas, are almost entirely hens. Yet, as he seems not to have dissected any, he might have been deceived by the change of plumage, which is extremely probable.

about the end of winter, and return the succeeding autumn. On the other hand, I find from Willughby, that they continue the whole year in England, and that few birds are so common.

They are spread through the whole of Europe, from the shores of the Baltic and Sweden, where they are frequent, and nestle, to the Straits of Gibraltar, and even the coasts of Africa \*.

The Chaffinch is a lively bird, and perpetually in motion; and this circumstance, joined to the sprightliness of its song, has given rise to the proverbial saying, gay as a Chaffinch. It begins to chant very early in the spring, and several days before the Nightingale, and gives over about the summer solstice. Its song has merited an analysis: and it is distinguished into the prelude, the quavering, and the close †; names have been appropriated to the different parts; and the greatest connoisseurs in these

<sup>\* &</sup>quot;Being stationed on the coasts of Africa, we were very often visited on board by Chassinches. We cruised between the thirtieth to the thirty-sisth degree of latitude:—I have even heard it affirmed, that they are found at the Cape of Good "Hope." Note of Viscount Querboent.

<sup>†</sup> The prelude is, according to Frisch, composed of three similar notes or strokes; the quaver, of seven different notes descending; and the close, of two notes. Lottinger has also made some observations on this subject. "In anger, the air of the "Chassinch is simple and shrill; in sear, plaintive, short, and often repeated; in joy, it is lively, and ends with a fort of burden."

little matters agree, that the concluding part is the most agreeable \*. Some find its music too strong, or too grating †; but this must be imputed to the excessive delicacy of our organs, or rather it is because the sound is too near, and increased by the confused echo of our apartments: Nature has destined the Chassinches to be songsters of the woods; let us repair then to the grove, to taste and enjoy the beauties of their music.

If a young Chaffinch taken from the nest be educated under a Canary, a Nightingale, &c. it will have the song of its instructors: more than one instance ‡ has been known of this; but they have never been brought to whistle our tunes:—they never depart so wide from nature.

The Chaffinches, beside their ordinary warble, have a certain tremulous expression of love, which they can utter in the spring, and also another cry which is unpleasant, and said to portend rain §. It has been remarked too, that they never sing better or longer than when, from some accident, they have lost their sight ||; and

<sup>\*</sup> In German, this is called Reiterzu; in French, Boute-felle.

<sup>†</sup> This facility in learning the fongs of other birds accounts for the diversity observed in the warble of the Chassinches. In the Netherlands, sive or six kinds of Chassinches are distinguished by the various length of their airs.

<sup>§</sup> In the German language a word is appropriated to denote this: it is Schircken.

<sup>||</sup> They are liable to this accident, especially if kept between two windows which face the south.

no sooner was this observation made, than the art was discovered of rendering them blind. The lower eyelid is connected to the upper by a fort of artificial cicatrix made by touching flightly and repeatedly the edges with a wire heated red-hot in the fire, and taking care not to hurt the ball of the eye. They must be prepared for this fingular operation by confining, them for ten or twelve days to the cage, and then keeping them thut up with the cage in a chest night and day, to accustom them to feed in the dark \*. These blind Chassinches are in-- defatigable fingers, and they are preferred as calls to decoy wild Chaffinches into the snares: these are also caught with bird-lime and with different kinds of nets, and among others those for larks, but the meshes must be smaller in proportion to the fize of the bird.

The time for the sport is, when the Chaffinches sly in numerous slocks, either in autumn before their departure, or in spring on their return. We must, as much as possible, choose calm weather, for they keep lower and hear better the call. They do not easily bend to captivity; they scarcely will eat any thing for the first two or three days; they strike their bill

continually

<sup>•</sup> Gesner asserts, that if the Chassinches be kept thus shut up through the whole summer, and not let out of their prison till the beginning of autumn, they sing during the latter season, which would otherwise not happen. Darkness rendered them dumb, but return of light is to them a second spring.

continually against the sticks of the cage, and often languish to death \*.

These birds construct their nest very round and compact, and place it in the closest trees or bushes; sometimes they build it even in our gardens upon the fruit-trees, and conceal it so artfully that we can hardly perceive it, though quite nigh. It is composed of white moss and fmall roots on the outlide, and lined with wool, hairs, spiders-webs, and feathers. The female lays five or fix eggs, which are reddiff gray, fprinkled with blackish spots, more frequent near the large end. The male never deferts his mate in the time of hatching; he fits at night always at hand; and if during the day he remove to a' short distance, it is only to procure food. Jealoufy has perhaps some share in this excessive affiduity; for these birds are of an amorous complexion: when two males meet in an orchard in the fpring, they fight obstinately, till one of them is vanquished and expelled: and the combat is still more fierce if they be lodged in the fame volery with only a fingle-female.

The parents feed their brood with caterpillars and infects: they also eat these themselves, but their ordinary subsistence is small seeds, those of the white thorn, of poppy, of burdock, of the rose-tree, and especially beech-mast, rape and

<sup>\*</sup> Those caught with lime-twigs often die the instant they are taken.

hemp feed. They feed also upon wheat and even oats, and are expert in shelling the grain to obtain the mealy substance. Though rather obstinate, they can in time be instructed like Goldsinches to perform several little feats; they learn to employ their wings and feet to draw up the cup when they want to eat or drink.

The Chaffinch sits oftener squatted than perched; it never walks hopping, but trips lightly along the ground, and is constantly busy in picking up something: its slight is unequal; but when its nest is attacked, it hovers above screaming.

This bird is somewhat smaller than our Sparrow, and is too well known to require a minute. description. The sides of the head, the forepart of the neck, the breast, and the loins are of a wine colour: the upper-part of the head and of the body chefnut; the rump olive, and a' white spot on the wing.' In the female. the bill is more flender, and the colours less bright than in the male; but in both fexes the plumage is very subject to vary. I have seen a hen Chaffinch alive, caught on her eggs the 7th of May, which differed from that described . by Brisson: the upper-part of its head and back was of a brown olive, a fort of gray collar furrounded the neck behind, the belly and the lower coverts of the tail were white, &c. And of the males, some have the upper-part of the head

and neck cinereous, and others of a brown chesnut; in some the quills of the tail nearest the two middle ones are edged with white, and in others they are entirely black. Does age occasion these slight differences?

A young Chaffinch was taken from its mother, when its tail-quills were fix lines in length, and the under-part of its body was like that of its mother; and the upper-part of a brown cinereous; the rump olive; the wings were already marked with white rays: but the edges of the fuperior mandible were not yet scalloped near the point as in the adult males. This circumstance would lead me to suppose that the scalloping which occurs in many species is not the primary organization, but is afterwards produced by the continual pressure of the end of the lower mandible, which is rather shorter, against the sides of the upper.

All the Chaffinches have the tail forked, composed of twelve quills; the ground colour of their plumage is dull cinereous, and the slesh is not good to eat. The period of their life is seven or eight years.

Total length fix and one-third inches; the bill fix lines; the alar extent near ten inches; the tail two and two-thirds, and extends about fixteen lines beyond the wings. [A]

<sup>[</sup>A] Specific character of the Chaffinch, Fringilla Cælebs, LINN.

"Its joints are black; its wing-quills white on both fides, the

"three

"three first without spots, two of the tail-quills obliquely white." Thus described by Brisson:—"Above it is dusky-chesnut; below white tawny; its rump green olive, (the lower-part of the neck and the breast wine coloured in the male,) with a white spot on the wings; the lateral quills of the tail are black, the outermost distinguished by an oblique white stripe, the next terminated obliquely with white on the inside."

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# VARIETIES of the CHAFFINCH.\*.

Before the frequent variations which may be perceived in Chaffinches bred in the same country, others are observed in different climates which are more permanent, and which authors have judged worthy of description. The three first have been found in Sweden, and the remaining two in Silesia.

I. The CHAFFINCH † with black wings and tail. The wings are indeed entirely black, but the outer quills of the tail, and the one next to it, are edged with white on the outlide from the middle. This bird lodges among trees, fays Linnæus.

This Finch is termed Fringilla Sylvia, in the Fauna Suecica + Fringilla Flavirostris Fusca, Syst. Nat. Ed. x.

- II. The BROWN CHAFFINCH\*. It is distinguished by its brown colour and its yellowish bill, but the brown is not uniform, it is lighter on the anterior part, and has a shade of the cinereous and blackish of the posterior part. This variety has black wings like the preceding; the legs are of the same colour, and the tail forked. The Swedes call it Riska, according to Linnæus.
- III. The CRESTED BROWN CHAFFINCH. It is fire-coloured, and this character distinguishes it from the preceding variety. Linnæus said in 1746, that it was found on the northern part of Sweden, but twelve years afterwards he recognized it to be the Black Linnet of Klein, and afferted that it inhabited every part of Europe.
- IV. The WHITE CHAFFINCH †. It is very rare according to Schwenckfeld, and differs only in regard to colour from the Common Chaffinch. Geiner affirms, that a Chaffinch was feen whose plumage was entirely white.

<sup>\*</sup> Fringilla Flammea Fusca, Syst. Nat. Ed. x.

<sup>+</sup> Fringilla Candida, Schwenckfeld.

V. The COLLARED CHAFFINCH †. The crown of its head is white, and it has a collar of the fame colour;—this bird was caught in the woods near Kotzna.

<sup>+</sup> Fringilla Torquata, Schwenckfeld,

# The BRAMBLING.

Le Pinson D'Ardenne, Buff.

Fringilla-Montifringilla, Linn. and Gmel.

Montifringilla, Gesner, Aldrov. Briss. &c.

Fringilla Montana, Roman. Orn.

The Bramble, or Brambling, Will.

The Mountain Finch, Ray.

Terhars this bird, which in general is supposed to be the Mountain Finch, or Orospiza of Aristotle, is in fact his Spiza, or principal Finch; or our Common Finch or Chassinch is his Mountain Finch. The following are the reasons which incline me to this opinion. The ancients never made complete descriptions, but seized a prominent seature of an animal, whether in its exterior appearance or in its habits, and marked it by an epithet. The Orospiza, says Aristotle\*, is like the Spiza; it is somewhat smaller; its neck is blue; and lastly, it inhabits the mountains; but all these are properties of the Chassinch, and some of them belong to it exclusively.

- Brambling, as will appear from the comparison; and all systematic writers have classed them together.
  - It is supposed to be Aristotle's Οξοσπίζα, or Mountain Finch, whose semale was termed χευσομίζες, or Golden Mitred. In German, Rowert, Schnec-Finck, Winter-Finck: in Swiss, Wald-Finck, Thann-Finck: in Swedish, Norrquint.

2. The

- 2. The Chaffinch is rather smaller than the Brambling, according to naturalists, and which agrees with my own observations.
- 3. In the Chaffinch, the upper-parts of the head and of the neck are of a bluish cinereous; whereas in the Brambling these are varied with glossy black and yellowish gray.
- 4. We have already remarked, on the authority of Olina, that in Italy the Chaffinch retires in summer to breed among the mountains; and, as the climate of Greece is little different from that of Italy, we may infer from analogy, it will there also have the same habits \*.
  - 5. Lastly, the Spiza of Aristotle appears to resort, according to that philosopher, to the warm regions during summer, and to prefer the cold climates in winter †. But this agrees better with the Brambling than with the Chassinches, since of these a great proportion never migrate, while the former not only are birds of passage, but

Frisch asserts that the Bramblings come from the mountains in autumn, and when they return they direct their course to the north. The Marquis de Piolenc, who has given me several notes on these birds, assures me that they leave the mountains of Savoy and Dauphiny in October, and do not return till February. These periods correspond well with the time when they are seen to pass and repass in Burgundy.—Perhaps both these species resemble each other in preferring mountains.

<sup>†</sup> Aldrovandus positively afferts, that this takes place in the neighbourhood of Bologna: Lottinger informs me, that some appear in Lorraine from the end of August, but that large slocks arrive towards the end of October, and even later.

generally arrive in the depth of winter \* in the different countries which they visit. This is evinced by experience, and is confirmed by the appellations of Winter-Finch, and Snow-Finch, which they have received in various places.

From all these considerations, it seems probable that the Brambling is the Spiza of Aristotle, and the Chassinch his Orospiza.

The Bramblings do not breed in our climates; they arrive in different years in immense flocks. The time of their passage is the autumn and winter: often they retire in eight or ten days, and sometimes they remain till the spring. During their stay, they confort with the Chassinches, and, like these, seek concealment in the thick foliage. Vast bodies of them appeared in Burgundy in the winter of 1774, and others in still more numerous slocks were seen in the country of Wirtemberg about the end of December 1775, which every evening reposed in a valley adjoining to the banks of the Rhine †, and commenced

Note of the Marquis PIOLENC.

<sup>·</sup> Hift. Anim. lib. viii. 3.

<sup>†</sup> Lottinger afferts perhaps too generally, that in the day-time they spread through the forests of the plain, and in the evening retire to the mountains. This conduct is not invariable, but seems to be affected by situation and circumstances.

A flock of more than three hundred were feen this year in our neighbourhood; it halted three or four days in the fame place, which is mountainous. They always alighted on the fame chefnut-tree, and when fired at, rose all at once, and constantly directed their course to the north and north-east.

their flight with the earliest dawn: the ground was covered with their excrements. The fame occurrence was observed in the year 1735 and in 1757\*. Never perhaps were so many of these birds seen in Lorraine, as in the winter of 1765: more than fix hundred dozen, says Lottinger, were killed every night in the pine-forests, which are four or five leagues from Sarbourg. The people were not at the pains to shoot them, they knocked them down with switches; and though this masfacre lasted the whole winter, the body was scarce perceptibly thinned. Willighby tells us, that many are feen in the neighbourhood of Venice, no doubt in the time of passage; but no where do they appear fo regularly as in the forests of Weissemburg, which are plentifully stocked with beeches, and consequently afford abundance of mast, of which they are so fond. that they eat it day and night; they live also on all forts of small feeds. I suppose that these birds remain in their native climate as long as they can procure the proper food, and quit it only when scarcity obliges them to shift their quarters; · at least, it is certain that the plenty of their favourite feeds is not sufficient to draw them to a country, and even to one with which they are acquainted: for in 1774, when there was abundance of beech mast in Lorraine, the Bramblings did not appear, but took a different

<sup>\*</sup> Gazette d' Agriculture, Ann. 1776.

route: however, in the following year, several flocks were seen, though there was a scarcity of mast\*. When they arrive among us, they are not shy, but allow a person to go very near them. They sly close together, and alight and rise in the same compact body; and for this reason twelve or sisteen of them may be killed at one shot.

When they feed in the fields, they are obferved to perform the fame manœuvres as the pigeons; a few always precede, and are followed by the rest of the flock.

These birds, we see, are known and spread through all parts of Europe; but they are not confined to our quarter of the globe. Edwards observed some that were brought from Hudfon's-bay, under the name of Snow-birds; and people who traded to that country assured him that they were the first which appeared every year on the return of spring, before even the snows were melted.

The flesh of the Bramblings, though somewhat bitter, is good to eat, and undoubtedly better than that of the Chassinch. Their plumage is also more varied, more beautiful, and more glossy; but their song is far from being so pleasant, and it has been compared to the screech of the owl † and the mewing of the cat ‡. They have two cries; the one a fort

<sup>\*</sup> I owe these facts to Mr. L'ottinger. + Belon. ‡ Olina.

of chirping, and the other which they utter when they fit on the ground resembles that of the Stone-chat, but is neither so strong nor so clear: Though by nature endowed with so few talents, these birds are susceptible of instruction; and when kept near another whose warble is more pleasant, their song gradually mellows, and comes to resemble that which they hear\*. But to have a just idea of their music, we must listen to them in the time of hatching; it is then, when chanting the hymn of love, that birds display their true warble.

A fowler, who had travelled, assured me that these birds are bred in Luxemburg; that they make their nests in the most branchy firs at a considerable height; that they begin about the end of April; that they employ the long moss of firs for the outside, and hair, wool, and feathers for the lining; that the female lays four or five yellowish spotted eggs; and that they begin to slutter from branch to branch about the end of May.

The Brambling is, according to Belon, a courageous bird, and defends itself with its bill to the last gasp. All agree that it is of a more easy temper than the Chassinch, and more readily ensured. Many of them are killed in certain fowling-matches which are frequent in the courtry of Weissemburg, and which deserve to be re-

lated. The fowlers affemble at the little town of Bergzabern; on the evening of the day appointed, they dispatch scouts to remark the trees on which the Bramblings commonly pass the night, and which are generally the pitch-pines, and other ever-greens; the scouts, after their return, serve as guides for the company, which set out in the evening with torches and shooting-trunks\*. The birds are dazzled with the glare, and killed by pellets of dry earth discharged from the trunks. They shoot very near, lest they should miss; for if a bird chanced to be wounded, its cries would scare away the flock.

The principal food of these birds, when kept in a cage, is panic, hemp-seed, and beech-mast: Olina says that they live four or sive years.

Their plumage varies: in some males the throat is black; in others, the head is entirely white, and the colours in general lighter †. Frisch remarks, that the young males are not so black at their arrival, and that the inferior coverts of their wings are not so vivid a yellow as at their departure. Perhaps a more advanced age occasions still other differences between the sexes, and may account for the diversity of descriptions.

The Brambling which I observed weighed an ounce; its face was black; the upper-part of its

r. † Áldrovandus.

head, neck, and back, varied with yellowishgray, and gloffy-black; the throat, the fore-part of the neck, the breast, and the rump, rust-coloured; the finall coverts of the base of the wing, yellow-orange; the others formed two transverse rays of a yellowish-white, separated by a broader black bar; all the quills of the wing, except the three first, had on their outer edge, where the great coverts terminate, a white fpot, about five lines long; the succession of these spots formed a third white ray, which was parallel to the two others when the wing was expanded, but when the wing was closed it appeared only like an oblong fpot almost parallel to the fide of the quills; lastly, these quills were of an exceedingly fine black, edged with white. The small inferior coverts of the wings next the body were distinguished by their beautiful yellow colour. The quills of the tail were black, edged with white, or whitish; the tail forked; the flanks streaked with black; the legs of a brown-olive; the nails flightly incurvated, the hind one the strongest of all; the edges of the upper mandible scalloped near the point, the edges of the lower one fitted into the upper; and the tongue parted at the tip into feveral delicate filaments.

The intestinal tube was fourteen inches long; the gizzard was muscular, coated with a cartilaginous membrane slightly adhering, and preceded by a dilatation of the assumption of the assumption.

by a craw of five or fix lines diameter: the whole was filled with small feeds without a single pebble. I did not see a cacum, or gall-bladder.

The female has not the orange spot at the base of the bill, nor the sine yellow colour of the lower coverts; the throat is of a lighter rufous; and it has a cinereous cast on the crown of the head, and behind the neck.

Total length fix inches and one-fourth; bill-fix lines and a half; alar extent ten inches; tail two inches and one-third, and reaches about fifteen lines beyond the wings. [A]

[A] Specific character of the Brambling, Fringilla Montifringilla, Linn.—" The base of its wings very yellow below." Brisson thus describes it:—Male. "Above black, the margins of the quills tawny, below white; the rump bright white; the lower part of the neck and the breast dilute-rusous; the lateral tail-quills blackish, their outer margins yellowish white, the outer-most has its first half white exteriorly."—Female: "Above dusky, the margins of its quills gray-tawny, below white; rump bright white; lower part of the neck and the breast gray-tawny; the lateral tail-quills dusky, their outer margins yellowish white, the outermost has its first half white exteriorly."

The Bramblings sometimes visit Britain in winter.

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#### [ 117 ]

### The LAPLAND FINCH.

Le Graud-Montain, Buff.
Fringilla Lapponica, Linn.
Fringilla Montana, Briff. and Klein.
Fringilla Calcarata, Pall.
Montifringillæ Congener, Aldr.
Greater Brambling, Alb.
The Lapland Finch, Penn. and Lath.

This bird is the largest of the European -Klein fays that it is equal in bulk to. Finches. It is found in Lapland, near Torneo. the lark. Its head is blackish, varied with a rusty-white colour, and marked on each fide with a white. ray, which rifes from the eye, and descends along the neck; the neck, throat, and breaft, are of a light-rufous colour; the belly, and the hind part, white; the upper-part of the body rusty, variegated with brown; the wings black, edged with pale-yellow and greenish, and crossed with a white ray; the tail forked, composed of twelve quills that are almost black, and edged with yellowish; the bill horn-coloured, and deeper near the point; the legs black.

Total length fix inches and a half; bill seven lines, and the legs and mid-toe the same; alar extent eleven inches and a half; tail two inches and a half, and stretches ten lines beyond the wings. [A]

<sup>[</sup>A] Specific character of the Fringilla Lapponica, LINN.—" Its head is black, its body gray and black, its eye-brows white, its outermost tail-quills marked with a wedge-shaped white spot."

It inhabits Greenland in the summer, lays in June, and soon retires. It is sound also in Lapland, and in the northern parts of Siberia. It appears in November at Hudson's-bay, where it passes the winter among the juniper bushes. It sings nearly like the Linnet, but has a lostier and better supported slight. It trips on the ground like a Lark, picking up seeds.

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#### The SNOW-FINCH.

Le Pinson de Neige, ou la Niverolle, Buff. Bringilla Nivalis, Linn. Gmel. and Briff.

This appellation is probably founded on the white colour of the throat, breast, and all the under-part of this bird; and also on the circumstances of its inhabiting the cold countries, and scarcely appearing in temperate climates, except in winter when the ground is covered with snow. Its wings and tail are black and white; the head, and upper-part of the neck, cinereous, in which it resembles the Chassinch; the upper part of the body of a gray-brown, varied with lighter colour; the superior coverts of the tail entirely black, and also the bill and legs.

Total length seven inches; the bill seven lines; the legs nine lines and a half; alar extent twelve inches; the tail two inches and seven lines, and stretches eight or nine lines beyond the wings. [A]

[A] Specific character of the Fringilla Nivalis: —" It is black, below fnowy, the fecondary quills of the wing and the coverts white." It is feven inches long,

### The BROWN GROSBEAK.

Le Brunor\*, Buff. Loxia Fusca, Linn. and Gmel.

This is the smallest of all the Finches. Its throat, breast, and all the upper-part of the body of an orange reddish; the head, and all the under-part of the body, is of a deep brown; but the feathers are edged with a lighter shade, which produces a mixed colour; lastly, the bill is white, and the legs brown.

Edwards, to whom we are indebted for our knowledge of this bird, could not discover from what country it came. Linnæus says that it is found in India.

Total length, three inches and one-fourth; bill, three lines and a half; legs, four lines and a half; tail, one inch, and extends fix lines beyond the wings. [A]

(, \* i. e., Brun-noir, or brown-black.

[A] Specific character of the Loxia Fusca:—" It is dusky; below whitish; the wing-quills from the third to the ninth are entirely white." It inhabits Africa and Bengal. It is nearly of the bulk of a Canary.

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# The COWPEN FINCH.

Le Brunet, Buff. Fringilla Pecoris, Gmel. Fringilla Virginiana, Briff.

The prevailing colour of this bird is brown; but it is lighter under the body. Catefby tells us that it is an inhabitant of Virginia, and that it affociates with the red-wing orioles and the purple grakles: he adds, that it loves to haunt the cow-pens, and hence its name; and that it is never feen in summer.

Total length, fix inches and three-fourths; the bill feven lines; the tail two inches and a half, and extends fifteen lines beyond the wings; the legs eleven lines, the mid-toe, the fame. [A]

'[A] Specific character of the Fringilla Pecoris:—" It is dusky, below more dilute, the tail somewhat forked," It is larger than an English Bullsinch.

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## The BONANA FINCH,

Le Bonana, Buff.
Fringilla Jamaica, Linn. Gmel. Briff.
Passer Cæruleo-Fuscus, Ray, Sloan, Klein.
Emberiza Remigibus Rectricibusque Nigris, Amæn. Ac.
Gray Grosbeak, Brown's Jam.

This bird delights to perch on the banana, or bonana, which has given occasion to its name.

The feathers of the upper-part of the body are filky,

filky, and dull blue; the belly variegated with yellow; the wings and tail of a dull blue, bordering on green; the legs black; the head large in proportion to the body; the bill short, thick, and round.

This bird inhabits Jamaica.

Total length four inches and a half; the bill four lines; the alar extent eight inches and some lines; the tail about sixteen lines, and stretches five or six lines beyond the wings. [A]

[A] Specific character of the Fringilla Jamaica: "It is gray, its breast green-corrulean, the quills of its tail and wings black." It is of the bulk of the Siskin, and sive inches long.

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#### The ORANGE FINCH.

Le Pinson à Tête Noire & Blanche\*, Buff, Fringilla. Zena, Linn. Fringilla Bahamensis, Briff, and Klein. The Bahama Finch, Catesby.

The head, back, and scapular feathers, are black; but on each side of the head are two white rays, one of which passes above, and the other below the eye. The neck is black before and dull red behind, which is spread over the rump, and the superior coverts of the tail; the throat is yellow; the breast, orange; the belly is white as far as the lower coverts of the tail,

<sup>\*</sup> i. e. Black and White-headed Finch,

and including them; the tail is brown, and the wings are of the same colbur, but have a white transverse ray.

This bird is very common in Bahama, and in many other tropical parts of America. nearly of the fize of the Common Chaffinch; it weighs fix gros.

Total length fix inches and one-fourth; the bill feven lines; the tail two inches and onethird, and extends about fifteen lines beyond the wings. [A]

[A] Specific character of the Fringilla Zena: - " It is black, below white, a line above and below the eye bright white, the , " breast fulvous."

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#### The TOWHE BUNTING.

Le Pinson Noir aux Yeux Rouges . Buff. Emberiza Erythrophthalma, Gmel. Fringilla Erythrophthalma, Linn. Fringilla Carolinensis, Brist.

Black predominates on the upper-part of this bird (on the top of the breast, according to Catefby) and on the quills of the wings, and the tail; the latter, however, are edged with white; the middle of the belly is white; the rest of the under-part of the body dull red; the back black; the eyes red; and the legs brown.

Black Finch with red eyes:" The Linnæan appellation also of Erythrophthalma (ερυθρωφθαλμος) expressly the same. · .... - 1

The female is entirely brown, with a red tinge on the breast.

This bird is found in Carolina; it goes in pairs, and lodges in the thickest woods; it is of the bulk of a Crested Lark.

Total length eight inches; the bill eight lines; the legs fixteen lines; the tail three inches, and extends about twenty-seven lines beyond the wings, from which circumstance we may infer that it cannot fly to a great distance. [A]

[A] Specific character of the Emberiza Erythrophthalma: — It is black shining with red, the lower belly tawny, with a white spot on the wings."

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#### The BLACK and YELLOW FINCH.

Le Pinson Noir & Jaune, Buff. Fringilla Capitis Bonæ Spei, Briff.

The general colour of this bird is velvet-black, which fets off the beautiful yellow that prevails on the base of the wing, the rump, and the superior coverts of the tail, and which borders the large quills of the wings. The small quills, and the great coverts, are edged with gray; the bill and legs are also gray.

This bird was fent from the Cape of Good Hope, and is of the fize of an ordinary Chaffinch.

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Total

#### 124 THE BLACK AND YELLOW FINCH.

Total length above fix inches; the bill eight lines; the legs twelve lines; the mid-toe ten lines, the hind-toe nearly as long; alar extent ten inches and one-fourth; the tail two inches and two lines, and stretches twelve lines beyond the wings.

#### . The LONG-BILLED FINCH.

Le Pinson a Long Bec, Buff. Fringilla Longirostris, Gmel. Fringilla Scnegalensis, Briss.

The head and throat are black; the upperpart of the body varied with brown and yellow, the under-part with yellow-orange; it has a chefnut collar; the quills of the tail are olive on the outfide, the great quills of the tail are of the fame colour, tipt with brown; the middle ones brown, edged with yellowith; the bill and legs gray brown. It was fent from Senegal. Its bulk nearly that of the Common Chaffinch.

Total length fix inches and one-fourth; the bill nine lines; the legs eleven lines; the midtoe ten lines; the alar extent ten inches and one-fourth; the tail two inches and a half, and reaches an inch beyond the wings. It has the longest bill of all the known Finches. [A]

<sup>[</sup>A] The specific character:—" It is variegated with dusky and "yellow, orange below, the tail olive, the head and throat black, the collar bay?"

# · The CHINESE FINCH.

L'Olivette, Buff. Fringilla Sinica, Linn. Fringilla Sinensis, Briss.

The base of the bill, the cheeks, the throat, the fore-part of the neck, and the superior coverts of the tail, are of an olive-green; the upper-part of the head, and of the body, of an olive-brown, with a slight rusous tinge on the back, the rump, and the coverts of the wings next the body; the tail black, edged with white, and tipt with whitish; the breast and the belly rusous, mixed with yellow; the inferior coverts of the tail and of the wings, of a fine yellow; the bill and the legs yellowish. It is nearly of the size of a Linnet. The female has the colours, as usual, more dilute.

Total length five inches; the bill fix lines; the legs fix lines and a half; mid-toe seven lines; alar extent eight inches and one-third; the tail twenty-one lines, forked, and projecting only five or fix lines beyond the wings. [A]

<sup>[</sup>A] The specific character:—" Olive-rusous, below brick, coloured, the quills of the wings and tail yellowish at the base." Brisson describes it as "dusky-olive, below tawny-yellow; the fore-part of the head, and the lower part of the neck green-olive; the first half of the tail-quills yellowish, the other half black; the tips of the wings whitish."

#### The EUSTACHIAN FINCH.

Le Pinson Jaune & Rouge\*, Buff.

Fringilla Eustachii, Gmel.

Fringilla Insulæ St. Eustachii, Briss. and Klein.

Passer Africanus Eximius, Seba.

Yellow predominates on the throat, the neck, the head, and all the upper-part of the body; on all the extremities, viz. the bill, the legs, the wings, and the tail: these two colours meeting together form a beautiful orange on the breast, and on all the lower-part of the body. On each side of the head there is a blue spot immediately below the eye.

Seba fays that this bird was sent from the island of St. Eustatius, and he calls it the African Finch; probably because this author knew an island of St. Eustachius in Africa very different from that which commonly goes under that name, which is one of the Little Antilles. It is nearly of the size of the Chassinch.

Total length five inches and a half; the bill fix lines; the legs fix lines and a half; the mid-toe feven lines; the tail twenty-one lines, and extends about ten lines beyond the wings. [A]

Ai, e. The Yellow and Red Finch.

<sup>[</sup>A] Specific character:—" Yellow, gold-colour below, with a corrulean fpot below the eyes, the wings and tail red." Briffon's description is precisely the same.

# The VARIEGATED FINCH.

La Touite, Buff. Fringilla Variegata, Gmel. Fringilla varia Novæ Hispaniæ, Briss.

Seba gives this bird the name of Twite, which it received in New Spain, and which feems borrowed from its cry.

This charming bird has its head of a light red, mixed with purple; the breast of two sorts of yellow; the bill yellow; the legs red; all the rest variegated with red, white, yellow, and blue; lastly, the wings and tail edged with white. It is nearly of the size of the Common Chassinch.

Total length, five inches and two-thirds; the bill fix lines and a half; the legs eight lines; the mid-toe seven lines and a half; the tail two inches, and it stretches eleven lines beyond the wings. [A]

<sup>[</sup>A] Specific character: Variegated with red, yellow, cœrulean, and white, the breast clouded with yellowish, the tailquills with a white margin." Brisson describes it, "variegated
like marble, with red, yellow, cœrulean, and white, the head
tinged with a faint red mixed with purple; the breast whitish,
shaded with deep yellow; the tail-quills edged with white."

## The FRIZZLED FINCH.

Le Pinson Frise, Buff.
Fringilla Crispa, Linn. Gmel. and Briss.
The Black and yellow Frizzled Sparrow, Edw.
In Portuguese, Beco de Prata.

This bird owes its name to the frizzled feathers on its bill and back. Its bill is white; its head and neck black, as if it were a hood of that colour; the upper-part of the body, including the quills of the tail and of the wings, brown olive; the under-part of the body yellow; the legs deep brown.

As this bird came from Portugal, it is prefumed that it was fent from the principal settlements of that nation, viz. the kingdom of Angola in Africa, or from Brazil.

It is nearly of the fize of the Common Chaffinch.

Total length five inches and a half; the bill five or fix lines; the tail is composed of twelve equal quills, and extends twelve or thirteen lines beyond the wings. [A]

<sup>[</sup>A] Specific character:-" Olive, yellowish below, the head

black, with many reflected feathers." Brisson describes it, "rob-

ed in frizzled feathers, dull olive above, yellowish below; the

<sup>\*\*</sup> head and neck black; the tail-quills of a faint olive; the bill white."

### The COLLARED FINCH.

Le Pinson à double collier, Buff. Fringilla Indica, Gmel. Fringilla Torquata Indica, Briss. In Portuguese, Collherinho.

This bird has two half-collars, the one before and the other behind; the first is black, and is the lower of the two, the other is white; the breast also, and all the under-part of the body is stained with rust-colour; the throat, the ring of the bill and eyes of a pure white; the head black; all the upper-part of the body cinereous brown, which grows lighter on the superior coverts of the tail; the great quills of the wings black; the middle ones and the superior coverts black, edged with a glossy reddish brown; the bill black, and the legs brown. Brisson says that it is a native of India. It is as large as the Chassinch.

Total length about five inches; the bill fix lines; the tail twenty lines; it confifts of twelve equal quills, and projects ten lines beyond the wings. [A]

[A] The Specific character:—" Cinereous dusky rusous-white below; the bill, the head, the stripe on the throat, the quills of the wings and their coverts, the root of the bill, the orbits, and the upper-part of the neck, white." Thus described by Brisson: "Cinereous dusky above, white below, stained with tawny; the head and transverse stripe on the lower-part of the neck black; the small feathers at the base of the bill, the space about the eyes and the throat white; the collar whitish; the quills of the wings black, the smaller ones edged with rusous; the tail-quills cinereous-dusky."

VOL. IV.

### The MARYGOLD GROSBEAK\*.

Le Noir-Souci, Buff.
Loxia Bonariensis, Gmel.

I have formed an appellation for this new species from the two principal colours of its plumage: the throat, the fore-part of the neck. and the breast are marygold (fouci); the underpart of the body blackish (noiratre); the quills of the wings and of the tail also blackish, edged exteriorly with blue; the head and the upperpart of the neck of the same colour; the belly and the inferior coverts of the tail sulphur yellow; the bill blackish, short, strong, and convex; the inferior mandible lighter coloured; the nostrils round, placed in the base of the bill, and perforated; the tongue semi-cartilaginous and forked; the legs reddish brown; the mid-toe joined to the outer one by a membrane. as far as the first articulation; the outer toe the largest, and its nail the strongest; the nails are in general sharp, hooked, and scooped.

These birds appear in pairs; and the male and female seem to bear a mutual and faithful attachment: they frequent the cultivated fields and gardens, and live on herbs and seeds.

<sup>\*</sup> Specific character:—" Blackish, yellowish below, the head and upper-part of the neck corrulean, the neck and breast tawny."

Commerson, who first introduced them to our acquaintance, and who observed them at Buenos-Ayres in the month of September, assigns their rank between the Finches and the Grosbeaks. He says they are of the size of a Sparrow.

Total length feven inches; the bill feven lines; alar extent eleven inches and a half; the tail thirty-three lines, and confifts of twelve equal quills; the wings have feventeen quills, and the fecond and third are the longest of all.

# The WIDOWS.

Les Veuves, Buff.

A LL the species of Widows are inhabitants of Africa; but they are not entirely confined to that region, for they occur in Asia, and even in the Philippine Islands. They all have a conical bill of fufficient strength to break the feeds on which they feed: they all are distinguished by a long tail, or rather by long feathers, which in most of the males accompany the true tail, and are inferted above or below its origin: lastly, all, or nearly all of them, are subject to two annual moultings, the interval between which corresponds to the rainy season, and lasts. fix or eight months, during which the males lose not only their long tail, but their rich colour and pleasant warble \*; and it is not before the return of spring that they recover the attributes or ornaments of their fex.

The females undergo the same moultings, but not only is the change less perceptible in them, but the colours of their plumage are not so much affected.

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The melody of their fong is one of the reasons that induces Edwards to class them with the Finches rather than with the Sparrows.

The period of the first moulting in the young males must evidently depend on the time of their birth: those of the earliest hatch assume their long tail in May; but those hatched latest in the season, do not assume it till September or October.

Travellers affert that the Widows construct their nest with cotton, and that they divide it into two stories \*, the upper being destined for the male, and the under for the female. It is possible to ascertain this circumstance in Europe, and even in France, where by a careful attention the Widows may be made to lay and hatch, as is successfully practised in Holland.

These birds are lively and volatile, and are constantly raising and dropping the tail: they are very fond of bathing, not at all subject to diseases, and live twelve or sisten years. They are fed with a mixture of spikenard and millet; and by way of cooling, they have leaves of succory.

It is somewhat odd that the name of Widows, by which they are now generally known, and which seems to be very applicable to both, because of the black that predominates in their plumage, and because of their train at the tail, owed its origin to a mere mistake. The Portu-

Vide Kolben's description of the Cape of Good Hope. It appears very probable, that the changeable-plumaged Gold-finches, of which he speaks, are really Widow-birds.

guese called them at first Birds of Whidha (that is, of Juida), because they are very common on that coast of Africa; and foreigners were deceived by the similarity between that word and the name of Widow in the Portuguese tongue\*.

We shall here treat of eight species of Widows; viz. the five already known and described by Brisson; two new ones which are already distinguished by a beautiful red spot on the wing, and another on the breast: lastly, to these I shall add the Bird which Brisson calls the Longtailed Linnet, which, were it only for the long tail, I should rather range with the Widows than with the Linnets.

\* Edwards was led into this mistake, which he afterwards discovered.

# The GOLD-COLLARED WIDOW,

Emberiza Paradisca, Linn. Gmel. Borov. Vidua, Briss.

Passer Indicus Macrourus alius, Ray, Will. Klein, The Red-breasted Long-tailed Finch, Edw. The Whidah Bunting, Lath.

The neck of this bird is covered by a broad half-collar, of a fine yellow gold colour; the belly and thighs are white; the abdomen and the coverts of the under-part of the tail blackish; the head, throat, fore-part of the neck, back,

back, wings, and tail, black. The tail is formed as in other birds; it confifts of twelve quills nearly equal, and covered by four long feathers, which rife also from the rump, but somewhat higher: the two longest are about thirteen inches, and are black, like those of the tail, and appear waved, and as it were clouded; a little arched like those of the cock; their breadth, which is nine lines near the rump, is reduced to three near the extremity: the shortest are inclosed between the two longest, and are only half as long, but they are twice as broad, and end in a flender filky filament, more than an inch long.

These four feathers have their planes in a vertical fituation, and are bent downwards; they drop every year in the first moulting about the beginning of November, and at this period their plumage fuffers a total change, and becomes like that of the Brambling. It is now variegated on the head with white and black; the breaft, the back, the fuperior coverts of the wings, dirty orange, sprinkled with blackish; the feathers of the tail and the wings of a very deep brown; the belly, and all the rest of the under-part of the body, white: Such is its winter garb, which it retains till the vernal feafon, when it undergoes a fecond moulting as complete as the former, but happier in its effects, for it restores the fine colours, the long feathers, and all the decorations; and before the beginning

beginning of July the bird has experienced a total renovation. The colour of its eyes, of its bill, and of its legs, never vary: the eyes are chesnut; the bill lead-colour; and the legs slesh. colour.

The young females are nearly of the colour of the males in moult; but at the end of three years, their plumage has become brown, almost black, and changes no more.

These birds are common in the kingdom of Angola, on the western coast of Africa: some have also been sent from Mozambique, a small island on the eastern coast of the same continent, and which differed little from the former. The subject which Edwards sigured lived four years in London.

Total length fifteen inches; length measured from the tip of the bill to the end of the nails four inches and a half; the bill four lines and a half; the clear alar extent nine inches; the false tail thirteen inches; the true tail twelve lines, and projecting about an inch beyond the wings. [A]

[A] Specific character of the Emberiza Paradifæa:—" Dufky, the breast red, the four intermediate quills of the tail long and pointed; two very long, the bill black." Thus described by Brisson: "In Summer, glossy black above, wany white below; the upper-part of the neck tawny; the treast plotsy chainst the ail-quills black; the two intermediate others we early projecting beyond that adjacent; the logs stell colouted." In white below; the head variegated with white and black stripes; the tail quills dusky blackish, the outer-edges reddish chesnut; the legs stesh-coloured."

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THE SHAFT TAILED BUNTING .

# The SHAFT-TAILED, WIDOW.

La Veuve à quatre brins \*, Buff. Emberiza Regia, Linn. and Gmel, Vidua Riparia Africana, Briss. The Shaft-tailed Bunting, Lath.

This bird has the same two moultings as the preceding, and they are attended with fimilar effects. Its bill and legs are red; the headand all the upper-part of the body black; the throat, the fore-part of the neck, the breaft, and all the lower-part blush-coloured, but which is brighter on the neck than on the breaft, and extending behind the neck, it forms an half collar, which is broader the lower the black hood descends from the head. All the feathers of the tail are blackish, but the four middle ones are four or five times longer than those of the side, and the two middle ones are the longest of all: In moulting, the male becomes like the Linnet, only it is of a lighter gray. The female is brown, and has not the long feathers in the tail.

This bird is rather smaller than a Canary; several of them are living at Paris, and were all brought from the coasts of Africa.

The average measures are:—total length twelve or thirteen inches: that from the tip of

i. e. The Widow with four filaments. It is also called Silk-

the bill to the end of the nails four or five inches; the bill four or five lines; the alar extent eight or nine inches; the two mid-feathers of the tail nine or eleven inches; the two next eight or ten inches; the lateral ones twenty to twenty-three lines. [A]

[A] Specific character:—" The four long intermediate feathers of the tail equal, and bearded only at their infertion, the bill red." Brisson describes it, "black above; the neck tawny, variegated above with black spots; the tail feathers blackish, the four long intermediate ones surnished with plumules only at the origin; the bill and legs red."

## The DOMINICAN WIDOW.

Emberiza Serena, Linn. and Gmel. Vidua Minor, Briff. The Dominican Bunting, Lath.

If length of tail be the distinguishing character of the Widow birds, this is the least entitled to that appellation; for the longest quills of its tail scarcely exceed four inches. It has received the name of Dominican, on account of its black and white plumage; all the upper-part of the body is variegated with these two colours; the rump, and the superior coverts of the tail, are mottled with dirty white and blackish; the upper-part of the head of a white-real list, encircled with black; the throat, the fore-part of the neck, and the breast, of the same white, which also extends behind, and forms a half-collar

collar on the posterior surface of the neck. The belly has none of the rusous tinge. The bill is red, and the legs gray.

This species undergoes two moultings annually, like the preceding; in the interval the male is divested of its long tail, and its white is dirtier. The female never has these long feathers of the tail, and its plumage is constantly of an almost uniform brown.

Length to the end of the tail, fix inches and one fourth; to the end of the nails, four inches; the bill four lines and a half; the legs feven lines; the mid-toe feven lines and a half; the alar extent feven inches and a half; the middle feathers of the tail project about two inches and one fourth beyond the lateral ones, which are notched, and three inches and one fourth beyond the wings. [A]

[A] Specific character:-" With a black cap, the crown red. " the tail wedge-shaped, the two intermediate quills of the tail. " longest, the bill red." Thus described by BRISSON :- " Black " above, the edges of the feathers rufous, below white verging " to tawny, the crown rufous, the collar white-tawny, the tailquills black, the two intermediate ones longest, the three next " white at their origin, the two outermost tawny on their exterior " edges, and white on their interior; the bill red." Commerion suspected that a certain bird of a bluish-black which he saw in the · Isle of Bourbon, where it was called Brenoud, is nothing but this fame Widow in moult; and he thence concluded, that when the male moulted its plumage it was more uniform. But this would apply better to the female than to the male; and yet there is a wide difference between bluish-black, which is the colour of the Brenoud, and uniform brown, which is that of the female Dominican. This Brenoud resembles more the Great Widow.

# The GREAT WIDOW.

Emberiza Vidua, Linn. Vidua Major, Briss. Passer Indicus Macrourus Rostro Miniaceo, Ray, and Will. The Long-tailed Bunting, Lath.

The mourning garb of this Widow is somewhat brightened by the fine red colour of the bill, by a tint of bluish green spread over all the black, that is, over all the upper surface; by two transverse bars, the one white, and the other yellowish, with which the wings are decorated; and lastly, by the whitish colour of the lower part of the body, and the lateral quills of the tail. The four long feathers inserted above the true tail \* are black, and so are the quills of the wings; they are nine inches long, and very narrow. Aldrovandus adds, that the legs are variegated with black and white; and the nails black, very sharp and hooked. [A]

\* Aldrovandus expressly observes, that the male has a double tail like the peacock, and that the longer rests upon the shorter. It seems odd that Brisson describes the sour seathers of the upper tail as the intermediate ones of the true tail.

<sup>[</sup>A] Specific character:—"Blackish, whitish below, sour intermediate quills of the tail long and pointed, two of them the longest, the bill red.". Thus described by Brisson:—"Black above, mixed with a greenish sky-colour; whitish below, with a double transverse stripe on the wings, the one white, and the other slightly yellowish; the four intermediate tail-quills very long and black, the sour exteriors on each side whitish; the bill minium coloured."



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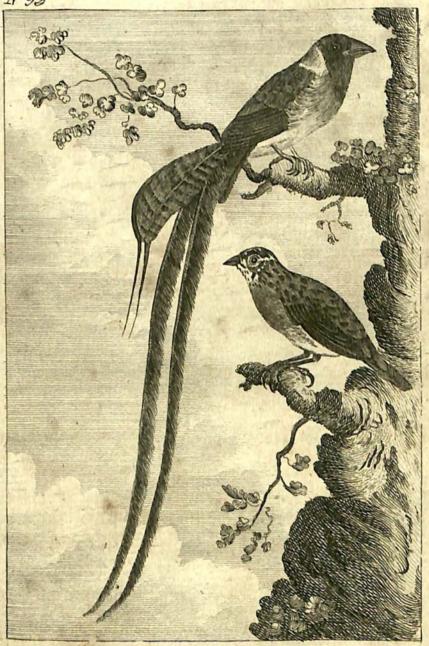


FIG4-THE LONG TAILED BUNTING.FIG2-THE SAME AFTER MOULTING.

#### The ORANGE-SHOULDERED WIDOW.

La Veuve à Epaulettes, Buff.
Emperiza Longicauda, Gmel.
Lovia Longicauda, Mill.
Cape-Sparrow, Kolb.
The Yellow-shouldered Oriole, Brown,
The Orange-shouldered Bunting, Lath.

The prevailing colour in the plumage of this bird is glosly black; and the only exception is in the wings, where the small coverts are of a fine red, and the middle ones of a pure white, which gives the bird a fort of epaulettes. The large as well as the small quills of the wings are black, edged with a lighter colour.

This bird is found at the Cape of Good Hope. It has, like all the rest, a double tail; the lower consists of twelve feathers nearly equal, the upper of six, which are of different lengths; the longest are thirteen inches, and in all, their plane is vertical.

Total length nineteen or twenty-one inches; the bill eight or nine lines; the legs thirteen lines; the tail thirteen inches. [A]

[A] Specific character:—"Black, the shoulders sulvous, bor"dered with white, the tail-quills long, and the fix intermediate
"ones project beyond the rest." It is of the bulk of a Thrush.

#### The SPECKLED WIDOW.

La Veuve Mouchetée, Buff.

Emberiza Principalis, Linn. and Gmel.

Vidua Angolensis, Briss.

Long-tailed Sparrow, Edw.

The Variegated Bunting, Lath.

All the upper-part is speckled with black on an orange ground; the quills of the wing and its great coverts are black, edged with orange; the breast is of a lighter orange, without speckles; the small coverts of the wing are white, and form a broad transverse bar of that colour, which predominates in all the lower-part of the body; the bill is of a lively red, and the legs slesh-coloured.

The four long feathers are of a deep black; they constitute no part of the true tail, as might be supposed, but form a fort of false tail which leans on the first. These long feathers are cast in moulting, but quickly replaced; which is common in most birds, though rather unusual in the Widows. When these feathers have acquired their full length, the two middle ones project five inches and a half beyond the lower tail, and the two others an inch less. The quills of the lower or true tail are of a dull brown; the side ones edged exteriorly with a lighter colour, and marked within with a white spot.

This bird is of the fize of the Dominican Widow; its bill is of a bright red, shorter than

that of the sparrow, and the legs flesh-coloured. [A]

[A] Specific character:—" Variegated, the breast rusous, the four middle tail-quills very long, the bill and legs red." Thus described by Brisson:—" Variegated above with black and " rusous, white below; the breast slightly rusous; the lesser sugar perior coverts of the wings white; four intermediate tail-quills very long and black; the four outermost on each side faintly dusky, edged exteriorly with a slighter dusky, spotted interiorly with white; the bill saffron."

M

# The FIRE-COLOURED WIDOW.

La Veuve en Feu, Buff. Emberiza Panayensis, Gmel. La Veuve de l'Iste de Panay, Sonn. The Panayan Bunting, Lath.

This bird is entirely of a fine glossy black, except a single red spot on its breast, which appears like a burning coal. It has four long equal feathers which are inserted below the true tail, and extend beyond it more than double its length; they grow narrower by degrees, so that they terminate in a point. This bird is found at the Cape of Good Hope, and in the island of Panay, one of the Philippines; it is of the size of the Gold-collared Widow. Its total length is twelve inches. [A]

M The

<sup>[</sup>A] Specific character:—" Black, a large scarlet spot on the, "breast, the four intermediate quills of the tail pointed, very long, equal and pendulous."

# The EXTINCT WIDOW.

La Veuve Eteinte, Buff.

Emberiza Psittacea, Linn. and Gmel.

Linaria Brasiliensis Longicauda, Briss. and Klein.

Fringilla Brasiliensis, Seba.

The Psittaceous Bunting, Lath.

Brown-cinereous is the prevailing colour of this bird; but the base of the bill is red, and the wings slesh-colour mixed with yellow. It has two quills triple the length of its body, which are inserted in the rump, and tipt with bayred. [A]

[A] Specific character:—" Cinereous-dusky, the wings ful-"vous, two of the tail-quills very long." Thus described by BRISSON:—" Dull cinereous-gray; the base of the bill encircled with a reddish ring; the wings variegated with dull cinereous-gray, the two intermediate ones longest, scarlet at their origin."

#### The GRENADIN.

Fringilla Granatina, Gmel. Granatinus, Briss. The Red and Blue Brazilian Finch, Edw. The Brasilian Finch, Lath.

The Portuguese, perceiving probably a resemblance between the plumage of this bird, and the uniform of some of their regiments, have named it the Oronoco Captain. Its bill and orbits are bright red; its eyes black; on the sides

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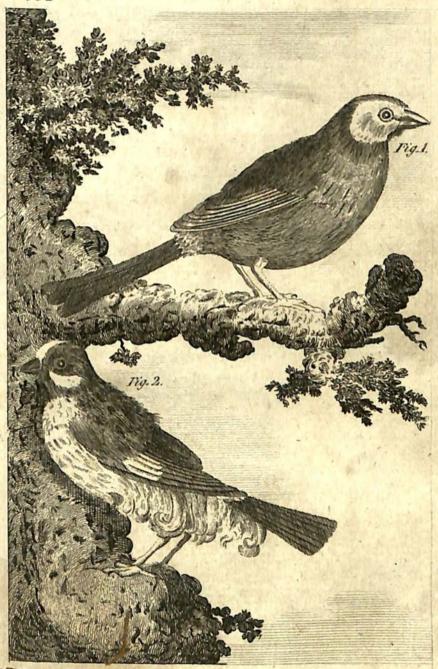


FIG 1 THE BRASILIAN FINCH.
FIG 2 THE FRIZ LED BRASILIAN FINCH.

of the head is a large plate of purple almost round, whose centre lies on the posterior edge of the eye, and which is interrupted between the eye and the bill by a brown spot; the throat and the tail are black \*; the quills of the wings brown-gray, edged with light-gray; the hind part of the body, both above and below, is of a blue-violet; all the rest of the plumage is gilded deep brown; but on the back it is variegated with greenish-brown, and this same gilded deep brown edges exteriorly the coverts of the wings. The legs are of a dull sless-colour. In some individuals the base of the upper-mandible is encircled by a purple zone.

This bird is found in Brazil. Its motions are lively, and its fong agreeable. It has the long bill of our Goldfinch f, but differs by its extended tapered tail.

The female is of the same size with the male; its bill red; a little purple under the eyes; the throat, and the under-side of the body, pale-fulvous; the top of the head of a deeper sulvous; the back brown-gray; the wings brown; the tail blackish; the superior coverts blue, as in the male; the inferior coverts, and the lower belly, whitish.

Total length five inches and one fourth; the hill five lines; the tail two inches and a half,

<sup>\*</sup> In some subjects the throat is of a greenish-brown.

<sup>†</sup> Edwards found the length of the bill to vary in different individuals.

#### THE GRENADIN.

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composed of twelve tapered quills, the longest exceeding the shortest by seventeen lines, and the extremity of the wings by two inches; the tarsus seventeen lines; the hind nail the strongest of all. In the wings the fourth and fifth quills are the longest. [A]

[A] Specific character:—" Its tail is wedge-shaped, its body tawny, its bill red; its temples, its rump, and its lower belly, violet."



THE GREENFINCH

# The GREENFINCH

Le Verdier, Buff.

Loxia Chloris, Linn. and Gmel.

Chloris, Aldrov. Gefner, Ray, Sibb. &c.

The Neighing Finch, Charleton.

This bird must not be confounded with the Yellow Bunting (Bruant), though in many provinces it bears the same name; for, not to mention other distinctions, it wants the offeous tubercle in the palate.

The Greenfinch passes the winter in the woods, and shelters itself from the inclemency of the season in the ever-green trees, and even in elms and branchy oaks which retain their withered leaves.

In spring it makes its nest in the same trees, and sometimes in bushes: this nest is larger, and almost as neatly formed as that of the Chassinch; it consists of dry herbs and moss, lined with hair, wool, and feathers: sometimes it places it in the chinks of the branches, which

<sup>\*</sup> It is called in Germany, Gruenling, Gruensinck, Kuttwogel, Tutter, Rapp-Finck, Hirs-Finck, Hirswogel, Welscher-Henssling, Kirsch-Finck; in Italy, Verdon, Verderro, Verdmontan, Zaranto, Caranto, Toranto, Frinsor; in Portugal, Verdelham; in Savoy, Verdeyre; in Illyria, Zeglolka; in Bohemia, Schwonetz; in Prussia, Gruener-Henssling, Schwontzke; in Poland, Dzwonieck, Konopka; in Sweden, Swenska:

it even widens with its bill; it also constructs near the spot a little magazine for provisions\*.

The female lays five or fix eggs, spotted at the large end with brown red on a white greenish ground. She sits assiduously, and still continues on her eggs though a person approaches pretty near; so that she is often caught with her young: at all other times she is shy and timid. The male feems to take much interest in the concerns of his future family; he relieves his mate in hatching; wheels round the tree where his hopes are lodged, makes fudden springs, and again finks back, flapping his wings, and warbling joyous notes †. At his return to the country, and at his departure, he utters a fingular cry, confifting of two founds. The warble is faid to be improved in the cross breed between the Greenfinch and the Canary.

The Greenfinches are gentle, and easily tamed; they learn to articulate a few words; and no bird so soon becomes expert at the little manœuvre of drawing up the cup. They eat from the singer of their master, and answer his call, &c. In autumn they join other species, to roam in the sields; they live upon juniper berries in winter; they crop the buds of trees, and

<sup>\*</sup> We owe there last facts, and some others, to M. Gussi + They are kept in a cage, because they sing pleasantly. Bruons Guys adds, that the warble of the semale is even superior to that of the male, which would be singular in birds.

<sup>†</sup> De la galere, alluding to the labour of a galley-flave!

particularly those of the bog-willow; they feed in summer on all forts of seeds, and especially those of hemp; they also eat caterpillars, ants, and grashoppers.

The name alone denotes that the predominant colour of the plumage is green; but the tinge is not pure; there is a gray-brown cast on the upper-part of the body and on the slanks, with an admixture of yellow on the throat and breast; yellow is spread over the top of the belly, the inferior coverts of the tail and wings, and on the rump; it edges the largest quills of the wings, and also the lateral quills of the tail: all these are blackish, and most of them bordered with white on the inside; the lower belly is also white, and the legs reddish-brown.

The female has more brown; her belly is entirely white, and the inferior coverts of her tail are mingled with white, brown, and yellow.

The bill is flesh-coloured, shaped like a cone, and similar to that of the Grosbeak, but smaller; its upper edges are slightly scalloped near the point, and receive those of the lower mandible, which are somewhat re-entrant. The bird weighs rather more than an ounce, and is nearly of the bulk of the House-sparrow.

Total length five inches and a half; the bill fix lines and a half; the alar extent nine inches; the tail twenty-three lines, somewhat forked, stretching beyond the wings ten or eleven lines. These birds have a gall-bladder, a muscular

gizzard covered with a loofe membrane, and a pretty large craw.

Some pretend that there are Greenfinches of three different fizes; but this is not sufficiently ascertained, and probably such variations are only accidental, resulting from age, from food, from climate, and from other like circumstances. [A]

[A] Specific character:—"Yellow-green, the primary wingquills yellowish before, the four lateral tail-quills yellowish at
their base." The Greensinch is very common in Great Britain,
and usually nestles in the hedges.

M

# The PAINTED BUNTING

Le Pape, Buff.
Emberiza-Ciris, Linn. Gmel.
Fringilla Maripofa, Scop. Ann.
Fringilla Tricolor, Klein.
Chloris Ludowiciana, Papa, Briff.
China Bulfinch, Alb.
The Painted Finch, Edw. and Catefby

This bird has its name (Pope) from the colours of its plumage, and especially from a sort

\* Specific character:—" The head coerulean, the lower bill fulvous, the back green, the quills dufky-green." Thus deferibed by Briffon: "Above green, inclining to yellow, below red; the head and the upper-part of the neck coerulean-violet; the rump red; the tail-quills dufky, both fides of the two intermediate ones varying to red, and the outer furface of the laviet and ones the fame." The Spaniards of Vera Cruz, which is visits in winter, call it Mariposa Pintada, or "the Painted Butterfly."

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FIG.1.THE CHINA BULFINCH. FIG.2.THE BLUE BULFINCH.



of capuchin, which rifes at the base of the bill, and extending below the eyes covers the upper and fide-parts of the head and neck, and in some individuals returns under the throat. The forepart of the neck, all the lower-part of the body, and even the superior coverts of the tail and of the rump, are of a fine red, almost fire-coloured; the back variegated with foft green and dull olive \*; the great quills of the wings and of the tail are of a reddish brown, the great coverts of the wings are green; the small ones are of a violet blue, like the capuchin. Nature requires time to form a plumage so charming, nor is it completed before the third year: the young Painted Buntings are brown the first year: in the second, their head is of a vivid blue. the rest of the body greenish blue, and the quills of the wings and of the tail are brown, edged with greenish blue.

But it is the female chiefly which resembles the Greenfinch; the upper-part of its body is of a dull green, and all the under-part of a yellowish green; the great quills of the wings are brown, edged delicately with green; the middle ones, and also the quills of the tail, divided length-wise into brown and green.

These birds breed in Carolina on the orange trees, but do not continue there during the

<sup>\*</sup> In the subject described by Catesby, the green back was terminated with yellow.

winter. Like the Widows, they have two moultings annually, which are earlier or later according to circumstances. Sometimes they assume their winter garb in the end of August or the beginning of September; in this state the under-part of their body changes from red to yellowish. They feed like the Widow-birds, upon millet, Canary-seeds, succory, &c. . . . but they are more delicate: however, if they are once seasoned to the climate, they will live eight or ten years. They are found in Louisiana.

The Hollanders have been able, by care and patience, to breed the Painted Buntings in their country, as they have succeeded with the Bengals and Widows; and it is likely that with the same attention they might be propagated in every part of Europe.—They are rather smaller than the House-sparrow.

Total length five inches and one-third; alar extent seven inches and two-thirds; the bill eight lines; the legs eight lines; the middle toe seven lines; the tail two inches, and stretches thirteen or fourteen lines beyond the wings.

#### VARIETY of the PAINTED BUNTING.

Bird-fanciers are acquainted with a variety of this species, which is distinguished by the colour of the under-part of its body being yellowish; it has only a small red spot on the breast, which is lost in moulting; then all the under-part of the body is whitish, and the male much resembles the semale. It is probably a variety produced in this climate.

M

#### The BLUE-FACED BUNTING\*

Le Toupet Bleu, Buff. Emberiza Cyanopsis, Gmel. Chloris Javensis, Briss.

This bird resembles the Painted Bunting so closely, that if the one had not been sent from Louisiana, and the other from Java, I should have regarded them as of the same species. Nay, when we consider the uncertainty in most ac-

<sup>\*</sup> Specific character:—" Green, the rump and lower-belly "rufous; the forehead, cheeks, and throat cœrulean; the quills "of the wings dusky and edged with green; the tail-quills edged "with red, the intermediate ones green, the rest dusky." Thus described by Brisson: "Above green, below rusous; middle of the belly red; rump rusous; the forehead, cheeks, and throat "cœrulean, the wing-quills green, their exterior borders red, the lateral ones dusky on the inside."

#### 154- THE BLUE-FACED BUNTING.

counts of the climate of birds, we may still be disposed to assign them to the same place. anterior-part of the head and throat is of a fine blue; the fore-part of the neck of a fainter blue; the middle of the belly red; the breast, the flanks, the lower belly, the thighs, the inferior coverts of the tail and of the wings, of a beautiful rufous; the upper-part of the head and neck, the anterior-part of the back, and the fuperior coverts of the wings, green; the lower part of the back and the rump of a bright rufous; the superior coverts of the tail red; the quills of the wings brown, edged with green; those of the tail the same, except the intermediate ones, which are edged with red; the bill is leadcolour; the legs gray:—the bird is fomewhat smaller than the Tree-sparrow.

Total length four inches; the bill fix lines; the legs fix lines and a half; the mid-toe seven lines; the alar extent near seven inches; the tail thirteen lines, composed of twelve quills, and stretching fix or seven lines beyond the wings.

M

#### The GREEN BUNTING\*.

Le Parément Bleu, Buff: Emberiza Viridis, Gmel. Chloris Indica Minor, Briss.

All our information with regard to this bird is derived from Aldrovandus; and that author only describes it from a coloured drawing brought into Italy, by some who had visited Japan, and who presented it to the Marquis Fachinetto.

All the upper-part is green, and all the lower white; the quills of the tail and of the wings blue, with white borders; the bill of a greenish brown, and legs black. Though this bird is rather smaller than the Greensinch, and its bill and legs more slender, Aldrovandus was convinced that Aristotle himself could not hesitate in referring it to that species: this Brisson has done, and we have no reason to reject the arrangement.

<sup>\*</sup> Specific character:—" Above green, below white; the "wing-quills and those of the tail coerulean."—Brisson gives the same description, only he adds, "that the wing and tail-quills shave white shafts."

#### The YELLOW FINCH\*

Le Vert-Brunet, Buff. Fringilla Butyracea, Linn. Chloris Indica, Briff.

Its bill and legs are brown; the upper-part of the head and neck, the back, the tail, and wings of a very deep green brown; the rump, the throat, and all the lower-part yellow; the sides of the head varied with the two colours, so that the yellow descends a little on the sides of the neck.

The Indian Greenfinch of Edwards may be regarded as a variety of this species; for all the upper-part is of a brown green, and the underpart yellow: the only difference being, that the green is not so deep, and extends upon the rump; but the sides of the head have two bars of the same colour, one of which stretches above the eyes, and the other, which is shorter, and of a deeper shade, lies under the first; and that the great quills of the wings are edged with white. The Indian Greenfinch is rather larger

<sup>\*</sup> Specific character:—" Green, the eye-brows, breast, and lower-belly yellow, the primary wing-quills white on their exterior edge." Described thus by Brisson: "Above of an olive-green, below yellowish; with a stripe on both sides, which is yellowish above the eyes, olive-green contiguous to them, and black below them; the quills of the wings olive-green, the outer-edge of the larger white; the quills of the tail faint yellow-green."—It is found in India, and at the Cape of Good Hope.

than the Canary Finch, and according to Edwards, its fong is superior.

Total length four inches and a half; the bill four lines and a half; the tarfus fix lines and a half; the mid-toe feven lines; the tail nineteen lines, somewhat forked, and extending nine or ten lines beyond the wings.

M

#### The BAHAMA FINCH\*.

Le Verdinere, Buff. Fringilla Bicolor, Linn. and Klein. Chloris Bahamensis, Briss.

Except the head, neck, and breast, which are black, all the rest of the plumage is green; we might call it a Greensinch with a black cowl. This bird is very common in the woods of the Bahama Islands; it sings perched on the tops of bushes, and constantly repeats the notes of the Chassinch. It is about the size of the Canary Finch:

Total length four inches; the bill four lines and a half; the tail nineteen lines, and extends nine or ten lines beyond the wings.

M

Specific character:—" The head and breast black; the back, wings, and tail obscure greenish." Brisson's description is presifely the same.—It is found also in Jamaica.

#### The GREENISH FINCH.

Le Verderin, Buff.

It has less green in its plumage than those of the preceding articles: its bill is shorter; its orbits greenish-white; all the feathers of the upper-part of the body, including the middle quills of the wings, their coverts, and the quills of the tail, are of a brown-green, edged with a lighter colour; the great quills of the wings black; the throat and all the under-part of the body, as far as the thighs, of a dull rusous, speckled with brown; the lower belly and the inferior coverts of the tail are of a pretty pure white. This bird is found in St. Domingo.

#### The VARIED GREENFINCH.

Le Verdier fans Vert, Buff.

This bird has none of the green colour of the Greenfinch, but is closely related to it in other respects. Its throat is white, the under-part of the body of the same colour; the breast variegated with brown; the upper-part of the head and body mottled with gray and greenish-brown; there is a rusous tinge on the termination of the back and on the superior coverts of the tail; the superior coverts of the wings of a deep rusous;

the middle quills edged on the outfide with that colour; the great quills and the great coverts edged with rufty white, and also the lateral quills of the tail; lastly, the most exterior of the latter is terminated by a spot of the same white, and is shorter than the rest. Of all the quills of the wing, the second and third are the longest.

This bird was brought from the Cape of Good Hope by Sonnerat.

Total length fix inches and one-third; the bill fix lines; the tarfus feven lines; the tail about two inches and a half, and extends fixteen lines beyond the wings.

### The GOLDFINCH\*.

Le Chardonneret, Buff.
Fringilla Carduelis, Linn. and Gmel.
Carduelis, Aldrov. Ges. Johnst. Sibb. &c.
Goldfinch, or Thistle-finch, Penn. Russ. Will. Alb. &c.

BEAUTY of plumage, melody of fong, fagacity, and docility, are united in this charming little bird, which, were it rare, and imported from a foreign country, would be highly prized.

Crimson red, velvet black, white, and gold yellow, are the chief colours which glisten on its plumage; and the mixture of lighter and deeper tints still heightens their lustre. Hence its names in different languages: some allude to the yellow spot that decorates its wings †; some to the red which covers its head and throat ‡; some to the brilliancy of its colours §; and others, to the

The Latin epithet Carduelis is derived from Carduus, a thiftle; and the French name Chardonneret is formed from Chardon, which also fignifies a thiftle. It is the Occurres of Aristotle.

<sup>\*</sup> In Germany it is called Stieglitz, Distel-Vogel, Kletter; Trunt, Roth Wogel; in Holland, Pitter; in Bohemia, Steglick; in Savoy, Charderaulat; in Poland, Sczigil; in Sweden, Stiglitza; in Italy, Gardello, Gardellino, Cardelino, Carzerino; in Spain, Sirguerito, Siele Colore, Forte Pintacilgo.

<sup>+</sup> Xewopuliens (Golden-mitred); aurivittis (with golden fillets); Goldench.

<sup>‡</sup> Roth-Vogel, Ger. (i. e. Red-bird.)

<sup>§</sup> Africas, aspudinos (from asni, a star.)

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THE GOLDFINCH

effect of their variety\*. When the wings are closed, each appears marked with a train of white points, which are apparent on the dark ground: these are the white specks which terminate all the quills of the wing, except the two or three first. The quills of the tail are of a still deeper black; the six intermediate ones tipt with white, and the two last have on each side on their inner webs an oval white spot, which is conspicuous. But these white points vary in their number and arrangement; and in general the plumage of the Goldsinch is far from being constant.

The female has less red than the male, and no black at all. The young ones do not assume their fine red till the second year: they are at first stained with dirty obscure colours, and, for that reason, they are called *Grisets*; but the yellow on the wings appears early, and also the

<sup>\*</sup> Ποικιλις, waried (variegated).

<sup>+</sup> Sometimes fix intermediate quills of the tail are tipt with white, sometimes eight of these, and sometimes only sour, or even two: and the Goldsinches have received appellations accordingly. Nay, the difference observed in their song has been attributed to the number of the small spots. Those which have six feathers tipt with white are said to warble the sweetest; but this affertion is without soundation, for the number is often diminished by moulting, though the song remains invariably the same. Kramer says, that the quills of the tail and of the wings are tipt with white in autumn, and are entirely black in spring: this needs to be qualified. I have beside me at present (6th April), two cock Goldsinches, in which all the wing-quills except the two sirst and the six intermediate ones of the tail, are tipt with white; and in which are also the oval spots on the inner-side of the two lateral quills of the tail.

white spots on the quills of the tail; yet these spots are of a duller white \*.

The males have a well-known and a pleasant warble.' They begin about the 1st of March, and continue during the whole of the genial feason: they chant even in the winter when kept in warm apartments, where they enjoy the temperature, of spring †. Aldroyandus ranks them the second of the finging birds: Daines .Barrington admits them only into the fixth place. They feem to have a greater facility in acquiring the fong of the Wren than that of any other bird ‡, (This, has, been experienced both by Salerne and Barrington. The latter indeed fuppoles, that this imitation was occasioned by the early impressions made by the notes of that little bird; but we must either account in the same way for the case noticed by Salerne, or admit that there is a certain analogy between the organs of found in the Goldfinch and the Wren. In England, the Goldfinches from Kent are

reckoned the best singers.

\* Observed before the 15th June. I have also remarked, that when the Goldanches were quite young, their bill was brown; except the point and edges, which were whitish and transparent; which is the reverse of their appearance when adult.

† I have two which fang every day through the whole of this winter, kept in a close chamber, but without any fire. 11 The greatest cold has not indeed been under eight degrees' thifty degrees Fahrenheit).

1 Philof, Trans. 1773. Olina says, that the young Goldfinches which hear Linnets, Canaries, &c. acquire their fong. But I know of a young cock Goldfinch and a young hen Linner that were bred together; and the Goldfinch retained his native warble, while the Linnet adopted and improved it. Thele

These birds and the Chassinches construct the neatest and most compact nests. They consist. of fine moss, lichens, liver-wort, rushes, small roots, and the down of thistles, interwoven with great art, and lined with dry grafs, hair, wool, and down: they generally place them in trees, and particularly on plums and walnuts, and commonly felect the weak branches which Thake the most. Sometimes they nestle in copses, and fometimes in thorny bushes; and it is said that the young Goldfinches bred in such situations are of a darker plumage, but more sprightly, and fing better than others. Olina makes the fame remark in regard to those hatched in the month of August. The female begins to lay about the middle of fpring, at first, five eggs, Ipotted with reddish brown near the large end \*. If the nest be demolished, she makes a second, or, even a third hatch, but the number of eggs diminishes each time. I have never found more than four eggs in the nests brought to me in July, nor more than two in those of September.

These birds are much attached to their young; they feed them with caterpillars and insects: if both be caught together and shut up in the same cage, the parents will still continue their care. It is true, that of four young Goldsinches which

Belon fays, that the Goldfinches have commonly eight young; but I have never found more than five eggs in about thirty here.

Thate.

I treated this way, none lived more than a month; but I attribute this to the improper choice of food, and not to the heroic despair which, it is pretended, prompts them to kill their offspring, and thus deliver them from flavery \*.

The cock Goldfinch ought to have only one female, and, that their union may be productive, both should be at liberty. It is somewhat singular, that the cock Goldfinch, when shut in a volery, is not somewhat singular, is not somewhat singular, as with the hen Canary †, or any other female of a warm temperament.

Sometimes the hen Goldfinch breeds with the cock Canary, but this is unfrequent ‡; and on the other, hand, the hen Canary, if separated from the males, will confort with the cock Gold-

Gerini, and many others. It is even added, that if the young ones be reared in a cage by parents which are fuffered to enjoy freedom, these observing after some time the impossibility of rescuing their brood from bondage, will out of compassion poison them with a certain herb. Such fables need no resutation.

† It is said that the Goldsinches intermix with none of a different species; and that the experiment has been made without success in regard to the Linnets. But I considertly affirm, that with proper care we may obtain not only this, but many other combinations: for the Siskins are still more easily reconciled to the society of the Canaries than the Goldsinches, and yet it is said that, in case of tivalship, the Goldsinches are preferred by the hen Canaries,

t Father Bougot, let a cock and hen Goldfinch into a volery where there was a great number of Canaries of both fexes. The male Canaries copulated with the hen Goldfinch, while the cock Goldfinch had no partner: which proves the ardour of the Canaries.

finch \*. The female is the first to feel the ardour of passion, and endeavours, by all alluring arts; and affifted by the still more powerful influence of the genial feafon, to urge her languid paramour to consummate this physical adultery: and yet there must be no female of his own species in the volery. The preliminaries last commonly fix weeks, during which time the hen Canary makes a complete laying of addle eggs, for which her incessant solicitations have not procured fecundation; what in animals may be termed lust, is almost always subordinate to the great end of nature, the reproduction of the species. Father Bougot, whom I have already quoted with approbation, has observed with attention the little maneuvres of the variegated female Canary in fuch dituations : she often approached the male Goldfinch, and squatted like a common hen, but with more expression, to invite him to the fruition: at first he is deaf to her folicitations, but the flame steals upon him by degrees †: often he begins the embrace, and his resolution as often

This circumstance is essential; for Father Bougot assures me, that if the female Canaries have a fourth or even a fixth of their number of males, they will not affociate with the cock Goldfinch; and that it is only when neglected by their own species that they join the Branger, in which case they always make the first advances.

<sup>+</sup> I have heard it alleged that the Goldfinch was a cold bird; he may be so in comparison of the Canaries, but after he is roused. he appears much animated; the male has frequently been observed to drop in an epileptic fit, while he chanted rapturoully in the height of his passion. fails;

fails; at each attempt he spreads his wiegs and gives vent to feeble cries. However, after the union is accomplished, he proceeds to discharge the duties of a parent; he affists his mate in constructing the nest \*, and carries food to her while she is engaged in hatching, or in rearing her young.

Though these constrained amours will sometimes succeed with a hen Canary and a wild Goldsinch, it is better to raise together those intended for breeding, and not to pair them till they are two years old. The offspring resembles more the father in the shape of the bill, in the colours of the head and of the wings, and in short in all the extremities, and the mother in the rest of the body: they have also been remarked to be stronger, and live longer; and to have a clearer natural warble, but to be not so docide in adopting the notes of our artificial music.

These hybrids are still capable of propagating, and when they are paired with the hen Canary, the second generation has a manifest analogy to the species of the Goldsinch +; so much does the male influence predominate in the act of generation.

continued motion, like the Linnet; and not by jerks and bounds, like the Sparrow. It is an

<sup>\*</sup> They prefer moss and dry grass for the materials.

active and laborious bird; if not employed in pecking the heads of poppies, of hemp, or of thistles, it is constantly busy in carrying backwards and forwards whatever it can find in its cage. One folitary male of this species is sufficient to disturb a whole volery of Canaries; it teazes the females while they are fitting, fights with their males, tears away the nests, and breaks the eggs. We should hardly conceive that birds for lively, and petulant could be for gentle and even so docile. They live in harmony with each other, feek each other's fociety, give marks of regard at all feafons, and feldom guarrel but about their food. 1. They are not so peaceful with other birds; they beat the Canaries and Linnets, but, in their turn, they receive the same treatment from the Titmouse. CI They have a fingular inffinct of always chufing to fleep in the highest part of the volery; and we may naturally suppose a ground of quarrel will be afforded, when the other birds will not give place to them.

of The docility of the Goldfinches is well known: they can be instructed without much trouble to perform feveral movements with accuracy, to fire a cracker, and to draw up small cups containing their food and drink; but for this last purpose they must be clothed. This clothing confifts of an small belt of fost leather two lines broad, with four holes through which the feet and wings are passed, and the ends joining under

der the belly, are held by a ring which supports the chain of the cup. In solitude it delights to view its image in the mirror, fancying it sees another of its own species; and this attachment to society seems to equal the cravings of nature; for often it is observed to pick up the hemp seed, grain by grain, and advance to eat at the mirror, imagining, no doubt, that it seeds in company.

To" fucceed in breeding Goldfinches, they ought to be feparated and raised singly, or at least each with the female with which it is in-

tended to be paired.

whole hatch; the young Goldfinches became tame at a certain age, and afterwards relapfed into the Tame favage state in which they would be found if bred by their parents in the field: they renounce the refinements of man to enjoy the society of their fellows.—But this is not the only inconvenience of training them together; they acquire an affection for each other, and when separated, to pair with a semale Canary, they are languid in their amours, are affected by the tender semembrance of former friendships, and commonly die of melancholy \*.

<sup>\*</sup> Offive Coldfinches bred in the volery of this lady, and paired with hen Ganaries, three remained inactive: the other two copulated, but broke the eggs, and died soon afterwards,

The Goldsinches begin to assemble in autumn, and during that feafon they are caught among the birds of passage which pillage; our garden's. Their - natural vivacity precipitates . them into the fnares; but, to fucceed well, it is necessary to have a male that has been accustomed to fing. They are not caught by calls; and they elude the bird of prey by taking shelter among the bushes. In winter they fly in numerous flocks, so that seven or eight may be killed at a shot; they approach the highways near which are thiftles and wild fuccory; they shake off the snow to obtain the seeds and the caterpillars. , In Provence they lodge in great numbers among the almond-trees, when the cold is intense they feek the cover of thick bushes, and always near their proper food. Those kept in the cage are commonly fed with hemp-feed\*. They live to a great age; Gefner faw one at Mayence which was twentythree years old; they were obliged once a-week to scrape its nails and bill, that it might drink, eat, and fit upon its bar; its common food was poppy-seeds; its feathers were all turned white; it could not fly, but remained in whatever fituation it was placed. In the country where I reside it sometimes lives sixteen or eighteen years.

They

Though it is true in general that the granivorous birds live upon feeds, they also eat caterpillars, small grubs and infects, and even feed their young with the last; they also devour with great avidity small rags of boiled veal; but such as are reared prefer in the end hemp and rape-seed to every other aliment.

They are subject to epilepsy, as I have already observed\*, and to melting of the fat; and the moulting often proves fatal to them.

Their tongue is parted at the tip into small filaments; the bill long, the edges of the lower mandible fitted into the upper; the nostrils covered with small black feathers; the outer, toe connected to the middle one as far as the first joint; the intestinal canal a foot long; slight traces of a cacum; a gall bladder; and a muscular gizzard,

Total length of the bird five inches and some lines; the bill fix, lines; the alar extent eight or nine inches; the tail two inches, and confifts of twelve quills; it is a little forked, and projects. ten or twelve lines beyond the wings to [A]

Owing, it is faid, to a long slender worm which creeps under the flesh in the thigh, and sometimes pierces through the skin, but which the bird eradicates with its bill. I doubt not the existence of these worms, which Frisch mentions; but I suspect that they are not the cause of the epilepsy. ,

<sup>+</sup> The young Goldfinches are not so long in proportion.

<sup>[</sup>A] Specific character of the Goldfinch, Fringilla Carduelis: "Its wing-quills yellow before, the outermost spotless; the two outmost tail-quills white in the middle, and the rest at the tip.' Thus described by Brisson :- "It is tawny-brown; the fore-" part of its head, and its throat, red; its wing-quills white at the tip, the first half yellow exteriorly; the tail-quills black, the fix "intermediate ones white at the tip, the two outmost on either "i' fide spotted interiorly with white." The shoulders of the male are black, those of the female cinereous; in the former the feat thers at the base of the bill are black, in the latter they are brown. The young bird is gray-headed, and thence named by the birdcatchers a gray pare. The egg is pearly, with scattered bloody and blackish spots.

#### VARIETIES of the GOLDFINCH.

Though the Goldsinch when kept in the cage does not so soon lose its red tinge as the Linner, yet, like all the domesticated birds, it is subject to frequent and material alterations in its plumage. I have already noticed the varieties of age and sex, and also the numerous differences that occur between individuals, in regard to the number and distribution of the small white spots of the tail and of the wings, and also with respect to the lighter or darker brown cast of the plumage. I shall here consider only the principal varieties which I have examined myself, or which have been described by others, and which appear to me as derived from accidental causes.

I. The YELLOW-BREASTED GOLDFINCH. It is not unfrequent to see Goldsinches which have the sides of their breast yellow, and the ring on their bill and their wing-quills of a lighter black. It has been supposed that they sing better than the others; it is certain that in the female the sides of the breast are yellow as in the male.

II. The GOLDFINCH WITH WHITE EXE-BROWS AND FOREHEAD\*. What is commonly red about the bill, and the eyes, in birds

<sup>\*</sup> Fringilla Carduelis, var. 1. Linn. . Garduelis Leucocepbalos, Briss.

of this kind, was white in the present. Aldrovandus mentions no other difference. I have feen a Goldfinch in which the part of the head usually black was white.

III. The GOLDFINCH WHOSE HEAD IS STRIPED WITH RED AND YELLOW\*. It was found in America, but probably carried thither. I have remarked in feveral Goldfinches, that the red of the head and throat was variegated with shades of yellow, and also with the blackish colour of the ground of the feathers, which in some parts gave a dark cast to the brilliant colours of the surface.

IV. The BLACK-HOODED GOLDFINCH †. The red peculiar to the Goldfinch is also found in this variety, but in small spots sprinkled on the forehead. Its wings and tail are also as usual; but the back and breast are of a yellowish brown; the belly and thighs of a pure white, the iris yellowish, and the bill and legs sleep-coloured.

Albin was informed by a person of credit, that, this individual was bred by a female Goldfinch with a male Lark. But a single testimony is not sufficient to support such an affertion; Al-

The Swallbur Goldfinch, Alb. and Lath.

Fringilla Carduelis, var. 2. Linn.
Carduelis Capite Striato, Briss.
† Fringilla Carduelis, var. 3. Linn.
Carduelis Melanocephalos, Briss.

bin adds by way of confirmation, that it bore fome resemblance to the Lark in its song and its habits.

V. The WHITISH GOLDFINCH\*. If we except the upper-part of the head and the neck, which were of a fine red, as in the Common Goldfinch, the tail which was ash-brown, the wings which were the same, with a bar of dirty yellow, the plumage of this bird was whitish.

VI. The WHITE GOLDFINCH To That of Aldrovandus was, like the common kind, marked with red on the head, and some of the wing-feathers were edged with yellow; all the rest were white.

That of Abbé Aubry had, a yellow tinge on the superior coverts of the wings, some of the middle quills black through their outer half, and tipt with white; the legs and nails white, the bill of the same colour, but blackish near the end.

I saw one at Baron de Goula's, of which the throat and forehead were of a faint red, the rest of the head blackish; all the under-part of the body white, slightly stained with assi-gray, but purer immediately under the red of the throat, and which rose as far as the blackish head; its

<sup>\*</sup> Fringilla Carduelis, var. 4. Linn. Garduelis Albida, Briss.

<sup>†</sup> Fringilla Garduelis, var. 5. Lim. Carduelis Gandida, Briff.

wings yellow, as in the Common Goldfinch; the superior coverts olive; the rest of the wings white, with a cinereous cast on the quills nearest the body; the tail nearly of the same white; the bill of a rose-white, and very long; the legs sless flesh-coloured. This variety is the more remarkable, being the production of nature; it was caught full grown in the fields.

Gefner was told that Goldfinches are found entirely white in the country of the Grifons.

VII. The BLACK GOLDFINCH\*. Several have been seen of that colour. That of Aspernacz mentioned by Anderson, grew quite black, after being long kept in a cage.—An instance precisely the same happened in the town where I live.

In the one described by Brisson, four quills of the wings, from the fourth to the seventh inclusive, were edged with a fine sulphur-colour on the outside, and white on the inside; the interior of the middle quills was also white, and one of them was tipt with the same colour; lastly, the bill, the legs, and the nails, were whitish.—But it is obvious that description presents only one view of a fleeting existence; the object of a general history is to trace the gradation of appearances, and to connect the individual with the species.

<sup>\*</sup> Fringilla Carduelis, var. 6. Linn. Carduelis Nigra, Briss.

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There are at present two Black Goldsinches at Beaune, of which I have obtained some information. They are two males, the one four years old, and the other of a greater age; each has undergone three moultings, and has as often recovered its beautiful colours: at the fourth moulting both have become of a pure glossy black; they have retained this colour about eight months, but it appears not more constant than the first, for now (March the twenty-fifth) they begin to perceive gray on the belly of one of these birds, red on the head, rufous on the back, yellow on the quills of the wings, and white at their tips and on the bill. It would be curious, to discover how these changes of colours are effected by the food, the air, the temperature, &c. It is known that the Goldfinch which Klein electrified, lost entirely in the course of six months not only the red on its head, but the fine lemon spot on its wings.

VIII. The ORANGE-HEADED BLACK GOLD-FINCH\*. Aldrovandus found this bird to be so different from the Common Goldsinch, that he regarded it as of another species, belonging to the same genus; it was as large as the Chaffinch; its eyes were proportionally larger; the upper-part of its body was blackish, the head of

Fringilla Carduelis, var. 7. Linn.

Carduelis Nigra Icterocephalos, Brist.

Cardueli Congener, Ray, and Will.

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the same colour, except that the anterior part near the bill was encircled by a ring of vivid orange; the breast, and the superior coverts of the wings, of a greenish black; the outer edge of the wing-quills the same, with a bar of faint yellow, and not of a fine lemon, as in the Gold-sinch; the rest of the quills black, variegated with white; those of the tail black, the outermost one edged interiorly with white; the belly cinereous brown.

This variety of colour was not owing to the effects of confinement. The bird was caught near Ferrara, and fent to Aldrovandus.

IX. The Hybrid Goldfinch\*. Many of these have been observed, and it would be tedious and unnecessary to describe them all. We may affert in general that, as in the mule quadrupeds, they resemble the father most in the extremities, and the mother in the rest of the body. But these are not real Hybrids, for they are bred between congenerous birds, such as Canaries, Goldsinches, Greensinches, Siskins, Yellow Buntings, and Linnets; and they are capable of propagation: nay, the breed seems to be improved by crossing, for they are larger, stronger, and have clearer voices, &c. One effect of this intermixture is a multiplication of

<sup>\*</sup> Fringilla Carduelis, var. 8. Linn.
Carduelis Hybrida, Briss.

<sup>\*</sup> The Canary Goldfineb, Alb. and Lath.

VARIETIES OF THE GOLDFINCH. 177
the pretended species. I shall give an example
in the Siskin.

The Hybrid of Albin was obtained from a cock Goldfinch, separated in its tender age from the mother, and a hen Canary. It had the head, the back, and the wings, of the Goldfinch, but with a slighter tinge; the under-part of the body, and the quills of the tail, yellow, the last tipt with white. I have seen some whose head and neck were orange; it seemed that the red of the male was melted into the yellow of the semale.

#### The LULEAN FINCH\*.

Le Chardonneret a Quatre Raies, Buff. Fringilla Lulenfis, Linn. Carduelis Suecica, Briss.

The most remarkable property of this bird is, that the wings, which are rusous-coloured at the base, are marked with four transverse rays of different colours, and in this order, black, rust, black, white. The head, and all the upper-part of the body as far as the end of the tail, are of a dull cinereous; the quills of the wings black-ish; the throat white; the belly whitish, and the bill brown. This bird is found in the tract situated on the west of the gulph of Bothnia, near Lulhea.

N

<sup>•</sup> Specific character:—"Dusky; the breast and shoulders ru"fous; the wings black, with a rusous spot; the under-surface of
the neck and body white."

# FOREIGN BIRDS, RELATED TO THE GOLDFINCHES.

I.

## The GREEN GOLDFINCH, or the MARACAXAO\*.

Fringilla Melba, Linn. Carduelis Viridis, Briss.

which he tells us came from Brazil.—In the male the bill, the throat, and the interior part of the head are of a red more or less bright, except a small space between the bill and the eye, which is bluish; the hind-part of the head and neck, and the back, yellowish-green; the superior coverts of the wings, and their middle-quills, greenish, edged with red; the great quills almost black; the tail, and its superior coverts, of a bright red; the inferior coverts ash-gray; all the under-part of the body striped transversely with brown on a ground which is olive-green

<sup>\*</sup> Specific character: — "Green; the face and tail red; the lower belly waved with white and black." Described thus by Baisson:—" Above yellowish-green, below white, striated transwertely with dusky; the anterior part of the head and the neck scarlet colour; the breast olive-green; the tail-quilts scarlet above, and ash-coloured below."

on the breast, and continually grows fainter till it becomes entirely white under the belly. This bird is about the size of the Common Goldsinch; its bill is of the same shape, and its legs gray.

The female differs from the male, its bill being of a yellow flesh-colour; the upper-part of its head and neck cinereous; the base of the wings and the rump yellowish-green, and so is the back, without any tint of red; the quills of the tail brown, edged exteriorly with red wine-colour; the inferior coverts white, and the legs flesh-coloured.

**M** .

#### II.

#### The YELLOW GOLDFINCH\*,-

Le Chardonneret Jaune, Buff. Fringilla Triftis, Linn. Carduclis Americana, Briff. Klein. American Goldfinch, Penn. Edw. Lath.

All those who have mentioned this bird give it the appellation of American Goldsinch; yet this term would not be proper till it was ascertained that no other Goldsinch existed in the

Specific character: — "Yellow, forehead black, the wings dusky." Thus described by Brisson: — "Yellowish Goldsfinch; crown black; white transverse stripe on the wings; quills of the wings and of the tail black; the exterior edges and the tips of the lesser wing-quills white." It feeds on thistle-seeds. The species includes a variety which is afterward, described by the name of the New York Siskin.

New World, and this supposition is not only improbable, but absolutely false, for that of the preceding article is a native of Brazil; I have therefore adopted another denomination, which characterizes its plumage. The bill is nearly of the same shape and colour as the Common Goldfinch; the forehead black, which is peculiar to the male; the rest of the head, the neck, the back, and the breaft, shining yellow; the thighs, the lower belly, the superior and inferior coverts of the tail, yellowish-white; the I fmall goverts of the wings yellow on the outside, whitish on the inside, and tipt with white; the great coverts, black, and terminated with white flightly shaded with brown, which form two transverse rays that are very apparent on the black wings; the middle quills of theferare tipt with white; those contiguous, to the back and their coverts are edged with yellow; the quills of the tail amount to twelve, are of equal lengths, black above, and equal below; the lateral ones white, on the infide near the tip; the bill, and legs flesh-coloured.

In the female the forehead is not black, but of an olive-green, and all the upper-part of the body is of the fame colour; the yellow of the rump, and of the under-part of the body, is less brilliant; the black on the wings more dilute, and on the contrary the transverse rays are not so faint; lastly, the belly, and the inferior coverts of the tail, are entirely white.

The

The young male is distinguished from the female by nothing but its black forehead.

The female observed by Edwards was shut up alone in a cage, and yet layed in the month of August 1755, a small egg of pearl-gray, and without spots; but, what is more uncommon, Edwards adds, that it moulted regularly twice a year, in March and September. In winter the body was entirely brown; but the head, wings, and tail, retained that colour only in summer. The male died too soon for this observation; but probably, like the female, it would have dropt its feathers twice annually, and in that respect resemble the Bengals, the Widow-birds, and many other natives of warm 'climates!

The fubject observed by Brisson, the belly, the loins, the inferior coverts of the tail, and of the wings, were of the same yellow with the rest of the body; the superior coverts of the tail white-gray; the bill, the legs, and the nails, white: but most of these differences may be owing to the different states in which the bird has been texamined. Edwards drew it from the life, and his specimen appears besides to have been larger than that of Brisson.

Catefby tells us that it is very rare in Carohad, more frequent in Virginia, and very comhon in New York. The one figured in the
PlioEnt. was brought from Canada, where Father Charlevoix law feveral of that species.

Total length four inches and one third; the bill five or fix lines; the tarfus the fame; the alar extent seven lines and one fourth; the tail eighteen lines, confishing of twelve equal quills, and stretching fix lines beyond the wings.

M

#### The LESSER REDPOLL\*

Le Sizerin, Buff.

"Fringilla Linaria, Linn, Brun. Kram. Fris. &c.

Fringilla Rubra Minor, Ray, Will. Briff. Klein.

The Lesser red-beaded Linnet, or Redpoll, Penn. Barr.

Ell. Alb. and Lath.

BRISSON calls this bird the Little Vine Linnet: but it appears to refemble the Siskin, and its song is much inferior to that of the Linnet. Gesner tells us, that at Nuremberg it has the name of *Tschiit-Scherle*, on account of its sharp cry; he adds, that it appears only once in five or seven years †, like the Bohemian Chatterers, and arrives in immense flocks. We learn from the relations of voyagers, that it sometimes pushes its excursions as far as Greenland ‡. Frisch informs

- \* In German, Zitzeberlein, Meer-Zeislein, Stock-hensling (Stick Linnet), and Roth-plattige hensling, (Red Plated Linnet); in Swifs, Schoperle; in Prussian, Tehetzke; in Swedish, Graosiska; the Greek name is Arysboc.
- † Whatever is uncommon turns into the marvellous. Some fay that the appearance of numerous flocks of the Leffer Redpolls forebodes a plague; others, that they are rats metamorphoted into birds before the winter, and refume their proper form in the fpring. In this way it is accounted for their not being found in fummer. Schwenckfeld.
- † "Another bird appears in Greenland in the tummer, which "refembles the Linnet, though smaller: it is distinguished by its head, which is partly red as blood; it may be fed with oat-

forms it is dermany it arrives in October and November, and departs in February.

I have faid that it bears more analogy to the Silkin than to the Linnet; this was the opinion of Gemer, and it is also that of Dr. Lottinger, who is well acquainted with these little birds. Frisch goes faither, for he afferts that the Silkin will lerve for a call to allure the Leffer Redpolls into fnares in the time of passage, and that the two species intermix and propagate with each other. Aldrovandus perceived a strong likeness between the Lesier Recipcil and the Goldfinch, which, except its red head, refembles much a Sifkin. A bird-catcher of great experience and little reading, told me that he has caught many of the Leffer Redpolls intermixed with Sifkins, which they were very like, especially the females, only their plumage was darker, and their bill shorter. Laftly, Linnaus fays, that the Leffer Redpolls frequent places covered with alders, and Schwenckfeld reckons the feeds of thefe trees among the aliments which they prefer; but the Silkins are extremely fond of these seeds.

board, like clouds driven by the wind, when a vessel, is eighty or a hundred leagues from land. They have a pleasant of those which the Chinese breed in cages to fight? These which the Chinese breed in cages to fight? These birds resemble Linnets, and as they perform distant journeys, is will be the less surprizing to find them in a country so remote.

Redpolls, eat not rape feed like the Linnet, but hemp feed, the feed of speckled nettles, of thistles, of flax, of poppies, and crop the buds of young branches of oak, &c.: they mix readily with. other birds: they are particularly tame in winter, and will then allow us to approach very near them without being scared \*. In general, they have little timidity, and can eafily be caught with lime-twigs.

The Lesser Redpoll frequents the woods, and often lodges in the oaks: it creeps along the trunk, like the Titmouse, and also clings to the extremity of the small branches, Hence probably is derived the name of Linaria Truncalis t, and perhaps that of Little, Oak.

The Leffer Redpolls grow very fat, and are excellent eating. Schwenckfeld lays, that they have a craw like the poultry, distinct from the small fac formed by the dilatation of the æfophagus before its infertion into the gizzard: this gizzard is muscular, as is that of all the granivorous tribe, and, many pebbles are found in it.

In the male, the breast and the top of the head are red, and there are two white transverse oftripes on the wings; the rest of the head and tall the upper-part of the body, mixed with brown and light rufous; the throat brown; the belly and the inferior coverts of the tail and

Those remarks are Lottinger's. Schwenckfeld relates, that a prodigious number of the Lesser Redpolls were caught in the beginning of winter A. D. 1602.

wings, rusty white; their quills brown, with a complete border of a more delicate colour; the bill yellowish, but brown near the tip; the legs brown. Those observed by Schwenckfeld had cinereous backs.

In the female, there is no red except on the head, and it is besides less bright. Linnæus excludes it entirely; but perhaps the one which he examined had been kept long in the cage.

Klein relates, that having electrified in the fpring one of these birds, and a Goldsinch, without occasioning to them any sensible injury, they both died the following October the same night: but what deserves to be noticed is, that both had entirely lost their red tinge.

Total length above five inches; the alar extent eight inches and a half; the bill five or fix lines; the tail two inches and a half, and somewhat forked," contains twelve quills, and projects more than an inch beyond the wings. [A]

[A] The specific character of the Lesser Redpoll (Fringilla Linaria, Linn):—" Variegated with dusky and gray, above tawny-white, whitish double stripe on the wings; the crown and breast red." Thus described by Brisson: Male. "Variegated, above dusky and tawny gray, below tawny-white, dusky foots between the bill and the eyes and under the throat, the crown and breast red."—Female. "Crown red, double transverse stripe on the wings, tawny-white; the tail-quills dusky, and the edges whitish-gray."

#### THE LESSER REDPOLL.

It inhabits the whole extent of Europe, from Italy to the utmost verge of the Russian empire: it is also found in the north of Asia and America. It is only half the fize of the Greater Redposit. It builds its nest among the alders, employing for that purpose small sticks and wool, and lining it with hairs and down. It lays four eggs of a light sea-green colour, marked at the large end with reddish points.—It breeds in the north of England, and restorts in slocks to the southern counties in winter; and in that sea-son, it feeds principally on alder seeds.

In the female the spot on the head is saffron coloured, and not red.

# The SISKIN\*.

Le Tarin, Buff.
Fringilla Spinus, Linn. Gmel.
Acanthus Avicula, Gefner.
Ligurinus, Will. Briff.
Spinus, seu Ligurinus, Aldrov.
Siskin, or Aberdaviue, Penn. and Lath.

reckoned the most a-kin to the Siskin; both have the bill elongated and slender near the point; both are gentle, docile, and lively. The fruits of their intermixture are also sit to propagate? Some naturalists have been induced by these analogies, to regard them as two contigutions species belonging to the same genus; indeed all the granivosous birds may be classed together; for their cross-breed are prolific. Since this general character extends to them all, it becomes the more hereestary to select the distinguishing features, and to trace the precise boundaries of each species.

The Siskin is smaller than the Goldsinch; its bill is proportionally shorter, and its plumage is

In German, Zinsel, Zyschen, Zeislein, Engelchen, Zixing, Gruine Hensling (Green Linget); in Italian, Lugaro, Lugarino, Luganello, Lucarino; in Polish, Czizeck; in Turkish, Utlugan; in Swedish, "Siska, Groen Siska; in Greek, Σπινός, Ακανθις, Θραυπίς; in Latin, Spinus, Acanthis, Thrausis, and Ligurinus, from μιγυς, οπ ές count of the shrillness of its notes.

entirely different: its head is not red, but black; its throat brown; the fore-part of its neck, its breast, and the lateral quills of its tail, yellow; the belly yellowish white; the under-part of the body olive-green, speckled with black, which assumes a yellow cast on the rump, and still more yellow on the superior coverts of the tail.

But in the more intimate qualities, which refult directly from organization or instinct, the differences are still greater. The Siskin has a fong peculiar to itself, and much inferior to that of the Goldfinch; it is very fond of alder-feeds, which the Goldfinch will never touch, and the Siskin, in its turn, is indifferent about thistlefeeds: it creeps along the branches, and suspends itself from their extremity like the Titmouse; In short, we might regard it as an intermediate species to the Titmouse and Goldfinch. Besides. it is a bird of passage, and in its migrations it flies at a great height, and is heard before it can be feen; whereas the Goldfinch continues with us the whole year, and never flies very high: , lastly, these two birds are never observed to asfociate together.

The Siskin can be taught like the Goldfinch, to draw up the little bucket: it is equally docile, and though not so active, it is more cheerful; for it begins always the earliest in the morning to warble, and to rouze the other birds. But, as it has an unsuspicious temper, it is easily decoyed into all forts of snares, traps, springs, &c.

and it is more easily trained than any other bird caught in the adult state. We need only to offer it habitually the proper fort of food in the hand, and it will foon become as tame as the most familiar Canary. We may even accustom. it to perch upon the hand at the found of a bell; for if at first we ring at each meal, the subtleaffociation of perceptions, which obtains also among the animals, will afterwards rouze it to. the call. Though the Siskin appears to select its food with care, it consumes much; but its voracious appetite is subordinate to a noble pasfion: it has always in the volery some favourite of its own species, or if that is not to be obtained, a bird of another species, which it che-- rishes and feeds with the fondness of a parent.-. It drinks often \*, but feldom bathes; it only approaches the margin of the water and dips its bill and breaft, without much fluttering, except perhaps in hot weather.

It is faid that it breeds on the islands in the Rhime, in Franche-comté, in Switzerland, Greece, and Hungary, and that it prefers the mountain forests. Its nest is very difficult to discover †, which

<sup>\*</sup> The bird-catchers lay lime-twigs at the fides of brooks, and are very successful in the capture.

<sup>† &</sup>quot;The bird-catchers in Orleans, fays Salerne, agree that the discovery of a Siskin's nest is a thing quite unheard of. It is probable, however, that some continue in the country, and breed near the banks of the Loiret, among the alders, of which they are very fond; and the more so as young ones are some-

<sup>&</sup>quot; times caught with limed twigs or in traps. M. Colombeau

which has given rife to a vulgar opinion, that the Siskin renders it invisible with a certain stone.

Accordingly, our accounts are imperfect in regard to that subject: Frisch says that it conceals its nest in holes; Kramer supposes the bird covers it with leaves, which is the reason that it is never found.—The best way to ascertain the point, would be to observe how they proceed when they breed in a volery; which, though the trial has not hitherto succeeded, is still possible.

But it is more common to cross them with the Canaries. There seems to be a great sympathy between the two species; they shew a reciprocal fondness at the very first meeting, and intermix indiscriminately\*. When a Siskin is paired with a hen Canary, he eagerly shares her toils; he is busy in carying materials for the nest, and arranging them; and regularly disgorges food for the sitting semale. But yet most of the eggs are addle: for the union of hearts is not alone sufficient in generation, and the tem-

<sup>&</sup>quot;of M. Hery de la Salle." Kramer tells us, that in the forests skirted by the Danube, thousands of young Siskins are found, which have not dropt their first feathers, and yet it is very rare to meet with a nest. One day when he was botanizing with one of his friends about the 15th of June, they both saw a male and semale. Siskin often sly towards an alder with food in their bills; but, though they searched with all possible care, they could neither hear nor see the young ones.

<sup>\*</sup> Father Bougot, from whom I received these remarks, has for five years seen a hen Canary breed thrice annually with the same cock Canary, and the four following years twice annually with another Canary, the first having died.

perament of the Siskin wants much of the warmth of the Canary.—The Hybrids resemble both parents.

In Germany, the Siskins begin to migrate in October, or even earlier; at this time they eat the hop seeds, to the great injury of the proprietors, and the places where they halt are strewed with leaves. They entirely disappear in December, and return in February \*. In Burgundy, they arrive at the season of vintage, and repass when the trees are in flower: they are particularly fond of the blossoms of the apple-tree.

In Provence, they leave the woods and defeend from the mountains about the end of autumn... At that time, they appear in flocks of more than two hundred, and fit all upon the fame trees or at a very little distance from each other. The passage continues fifteen or twenty, days, after which scarcely any more are tseen to

The Siskin of Provence is rather larger, and is of a finer yellow than that of Burgundy ‡.—
It is a slight variety of climate.

These birds are not so unfrequent in England as Turner supposed . They are seen as in

<sup>#</sup> Krisch.

<sup>+</sup> Note of the Marquis de Piolenc.

L Note of M. Guys.

<sup>§</sup> I mention this on the authority of Willighby. But the authors of the British Zoology say, that they never saw the bird in the country, and we must conclude that it is at least rare in Britain.

other places, during their migration, and sometimes they pass in very numerous slocks, and at other times in very small bodies. The immense slights happen only once in the course of three or four years, and some have supposed them to be brought by the wind \*.

The fong of the Siskin is not disagreeable, though much inferior to that of the Goldsinch, which it acquires, it is said, with tolerable facility; it also copies the Canary, the Linnet, the Pettychaps, &c. if it has an opportunity of hearing them when young.

According to Olina, this bird lives ten years †; the female of Father Bougot has reached that age, but we must observe that in birds the females always outlive the males. However, the Siskins are little subject to diseases, except the melting of the fat, when they are fed with hemp seed.

The male Siskin has the top of the head black, the rest of the upper-part of the body olive, and slightly variegated with blackish; the small upper coverts of the tail entirely yellow; the great coverts olive, terminated with cinereous; sometimes the throat is brown, and even black ‡; the

<sup>\*</sup> Olina. "In Prussia, myriads are caught in the yards." KLBIN.

<sup>†</sup> Those which toil at the bucket (à la galere) are much shorter lived.

<sup>‡</sup> All the adult males have not a black or brown throat: I have had some in which it was yellow, like the breast, and yet they had all the other characters of the males. I had an opportunity woll. IV.

the cheeks, the fore-part of the neck, the breaft, and the lower coverts of the tail, of a fine lemon yellow; the belly yellowish-white; the slanks the same, but speckled with black; there are two olive or yellow transverse stripes on the wings, the quills of which are blackish, edged exteriorly with an olive-green; the quills of the tail yellow, except the two intermediate ones, which are blackish, edged with olive-green; they have all a black shaft; the bill has a brown point, the rest white, and the legs are gray.

In the female, the upper-part of the head is not black, but somewhat variegated with gray; and the throat is neither yellow, brown, nor black, but white.

Total length, four inches and three-fourths; the bill five lines; the alar extent feven inches and two-thirds; the tail twenty-one lines, somewhat hooked, and projecting seven or eight lines beyond the wings. [A]

to see this black spot form by degrees on one caught in the net; it was at first about the size of a small pea, and extended insensibly to a length of six lines, and a breadth of four, in the space of eighteen months, and at present (8th April) it appears still to grow. This Siskin seems to be larger than common, and its breast of a finer yellow.

[A] Specific character of the Sifkin Fringilla Spinus:—" The wing-quills are yellow in the middle, the first four spotless; the quills of the tail yellow at the base, and black at the tip." The egg is very small, and white, with reddish spots.

M

# VARIETIES of the SPECIES of SISKINS.

I. In the month of September last year, a bird was brought to me that had been caught in a trap, and which must have been bred between the Siskin and Canary; for it had the bill of the latter, and nearly the plumage of the former: it had undoubtedly escaped from some volery. I had no opportunity of hearing its fong, or of obtaining progeny from it, fince it died in March following; but M. Guys informs me, that in general the warble of these hybrids is varied and pleafant. The upper-part of the body was mixed with gray, with brown, and with a little olive yellow; which last was the principal colour behind the neck, and was almost pure on the rump, on the fore-part of the neck, and of the breast as far as the thighs; lastly, it bordered all the quills of the tail and wings, the ground of which was blackish, and almost all the superior coverts of the wings.

Total length four inches and one-fourth; the bill three lines and a half; the alar extent seven inches and a half; the tail twenty-two lines, somewhat forked, and projecting nine lines beyound the wings; the hind-toe was the longest.

The '

# 196 VARIETIES OF THE SISKINS.

The asophagus two inches three lines, dilated in the shape of a small pouch before its insertion into the gizzard, which was muscular, and lined with a loose cartilaginous membrane; the intestinal tube seven inches and one-south; a small gall-bladder, but no cacum.

II. The NEW YORK SISKIN. We need only. to compare this with the European Silkin, to perceive that it is a variety refulting from the difference of climate. It is rather larger, and? has its bill somewhat shorter than sours: it!has a black cap; the yellow of the throat and breaft ascends behind the neck, and forms a short collar: the same colour borders most of the feathers. on othe highest parts of the back; and appears again on the lower-part of the back and on the rump; the superior coverts of the tail are white ? the quills of the tail and of the wings are of a fine black, edged and tipwwith white lalf the under-part of the body is dirty whitel: As the Siskins are roving birds, and flyevery lofty they may have migrated tinto North American and fuffered some changes in their plumage \*.

the body is olived, the under lemon; the head

<sup>\*</sup> Mr. Latham reckons this bird a variety of the Yellower-Goldfinch, or American Goldfinch, (Fringilla Triftis,) before defectibed.

<sup>+</sup> Fringilla Spinus, Var. 2. Linn.

black; the quills of the tail and wings blackish, edged more or less with light yellow; the wings marked with a yellow stripe. So far it much refembles the European and the New York Siskin, and its size and shape are the same: It is probably the same bird, which, being lately introduced into these different climates, has not yet undergone all the change.

In the female, the top of the heads is rof as brown-gray; and the cheeks lemon, as also the throat.

It that ampleasant long hand in that irespects excels ally the birds of South America. It is sound near Buenos-Ayres and the Straits of Magellan in the woods which the leter it from the severity of the cold and the violence of the winds. The one which Commerson law was caught by the foot between the two valves of a muscle.

The bill and legs were cinereous; the pupilibluish; the maid-toe ejoined by his applalanx to the following the hind-toe; the hind-toe; the thickest, and its hail she longest of all arithmeighed and ounce.

Total length four inches and a half; the bill five lines; the alar extent eight inches; the tail twenty-two lines; fomewhat forked, composed of twelve quills, and projecting about an inch beyond the wings; the wings confist of only fixteen feathers.

# 198 VARIETIES OF THE SISKINS.

IV. The BLACK SISKIN\*. As there are Black Goldfinches with an orange head, so there are Black Siskins with a yellow head. Schwenck-feld saw one of that colour in the volery of a Sile-sian gentleman; all the plumage was black except the top of the head, which was yellowish.

Fringilla Spinus, Var. 2, Linn, Ligurinus, Briss.

M

# FOREIGN BIRDS, RELATED TO THE SISKIN.

I.

# The CATOTOL\*

Fringilla Catotol, Gmel.
Cacatotol, Ray,
Ligurinus Mexicanus Niger, Briss.
The Black Mexican Siskin, Lath.

This is the name given in Mexico to a small bird of the fize of our Siskin, which has all the upper-part variegated with blackish fulvous, and all the lower-part whitish, and the legs cinereous: it resides in plains, lives on the seeds of a tree called by the Mexicans boaubtli, and sings agreeably.

<sup>\*</sup> Specific character:—" Variegated with blackish and sulvous, below bright white,"

#### II.

# The ACATECHILI\*

Fringilla Mexicana, Gmel. Ligurinus Mexicanus, Briss: Acatechichictli, Ray. The Mexican Sifkin, Lath.

The little which we know of this bird evinces its relation to the Siskin: its fize is nearly the same; its fong the same; and it feeds on the same substances: its head and all the upper-part of the body are greenish brown; the throat and all the under-part white shaded with yellow. The Mexican name Acatechichictli, signifies the bird that rubs itself against the reeds; may not this allude to some of its habits?

<sup>ा</sup> के Specific character := Greenish duskys below whitist? भे ा

# The TANAGRES.

Les Tangaras, Buff.

numerous genus of birds, some of which are called Tangarar at Brazil; and nomenclators have adopted this name for all the species included. These birds have been supposed by most travellers to be a kind of Sparrows; in fact, they differ from the European Sparrows only by their colours, and by a minute character, that the upper mandible is scalloped on both sides near the point. They closely resemble the Sparrows in their instinctive habits: they fly low and by jerks; their notes are for the most part harsh; they may be also reckoned granivorous, for they live upon very small fruits; they are social with each other, and, like the Sparrows, are so familiar as to visit the dwellings: they settle in dry grounds, and never in marshes; they lay two eggs, and sometimes, though rarely, three.

The Sparrows of Cayenne have seldom more eggs, while those of Europe have five or six; and this difference is perceived in general between birds of hot and those of temperate climates. The smalness of the hatch is compensated

fated by its frequent repetition, love being cherished and maintained by the continual and uniform warmth.

The whole genus of Tanagres, of which we know more than thirty species, exclusive of varieties, seems confined to the new continent; for all those which we have received were brought from Guiana and other countries of America, and not from Africa or India. This multitude of species is not surprising; for, in general, the number of birds in the torrid zone is perhaps ten times greater than in other regions, because nature is there more prolific, and take disturbed in her operations by the finterference of man; because forests are there more frequent, subfistence is more plentiful, and the colds of winter are unknown: and the natives of the tropical countries, rioting in a perpetual abundance, are totally exempted from the risks and dangers of a migration, and feldom are obliged even to shift from one haunt to another.

To avoid confusion, we shall range the thirty species of Tanagres into three divisions, adopting the characters from the most obvious difference, that of size,



THE GRAND TANAGRE

# The GRAND TANAGRE.

Tanagra Magna, Gmel.

# First Species.

This is represented N° 205, Pl. Enl. by the appellation of the Tanagre of the Woods of Cayenne; because I was told that it always came out of the extensive forests: but M. Sonini of Manoncour has since informed me that it also lodges often in the bushes in open situations. The male and semale, which are much alike, commonly by together. They live on small fruits, and sometimes eat the insects that prey on plants.

The figure will give a distinct idea of this bird. It is entirely a new species. [A]

[A] Specific character: — "Dufky olive; the forchead and "cheeks corulean; a black maxillary furrow; the neck and the lower part of the rump red; the cye-brows, and a fpot on the throat white." It is of the fize of a thrush; the under-part of the body reddish.

#### The CRESTED TANAGRE.

La Houppette, Buff. Tanagra Cristata, Linn. and Gmel. Tanagra Cayanensis Nigra Cristata, Briss.

#### Second Species.

This bird is not quite fo large as the preceding, and is proportionally thicker. Its owes its name

the wings and tail

name to a finall crest which it can cred at pleafure, and which diffinguishes it from all the other Tanagres.

It is very common in Guiana, where it lives on small fruits. It has a shrill cry, like that of the Chaffinch, but has not the fong of that bird. It is found only in the cleared spots. [A] q and

Un the upper-part of the [A] Specific character: — "Blackish; a gold coloured crest; "the throat and rump fulvous." Thus described by Baisson: -" Crested and blackish; the crest gold-coloured; the stathers " at the base of the bill black; the throat, the lowest part of the " back, and the rump, dilute fulvous; white spots on the wings; " the tail-quills blackish." It is fix inches and one fourth long its legs are lead-coloured.

#### The VIOLET TANAGRE.

Le Tangavio \*, Buff. Tanagra Bonariensis, Gmel O 3 of T

# Third Species.

We are indebted to the late M. Commerson for our knowledge of this bird: it is well preferved in his collection; he had called it the Black Bunting (Bruant Noir), which is very improper.—It is of a deep violet on the body, and even on the belly, with fome greenish reflections on the wings and tail.

It measures from the end of the bill to that of the tail eight inches; its bill is blackish, and

<sup>-</sup>into salts Contracted for Tangara-violet. In 10119 Holdw thologifts

eight or nine lines, in length; its tail, which is not taper, is three inches long, and projects, eighteen lines beyond the wings; the tarfus is about an inch long, and blackish, as well as the toes; the nails are thick and strong.

In the female the head is of althining black, like polithed steel; all the rest of the plumage is of an uniform blue. On the upper-part of the body, however, and on the rump, are some tints, of a shining black.

Ayres, and probably in other parts of Paraguay...
We are unacquainted with its mode of life... [A]

[A] Specific character:— Black-violei; the wings and tail gloffed with green."

# The SCARLET TANAGRE.

Le Scarlatte, Buff. \ Tanagra Rubra, var. Lina.

Fourth Species.

This bird is the same with the Cardinal of Brisson, and with the Scarlet Sparrow of Edwards. To it we should also refer, first, the two Red and Black Sparrows of Aldrovandus; the only difference being that the one happened to lose its tail, and this defect has been converted by Aldrovandus into a specific character, in which error he has been copied by all the ornithologists.

thologists\*. Secondly, The Tijepiranga of Marcagrave †. Thirdly, The Chiltototl‡ of Fernandez. Fourthly, and lastly, The Brazilian Blackbird of Belon, which received that name from those who first imported it into France. Aldrowandus has copied Belon. The descriptions coincide in every respect, except in the songs of these birds; and I observed that those which chanted were larger, had a brighter red tinge on the plumage, and also on the superior coverts of the wings, &c. which makes it very probable that they were the males; indeed in almost all kinds of birds it is the males that are musical.

It would also appear, that in the male the feathers on the head are longer, and form a fort of crest, as Edwards has figured it. This has led some travellers to say that there are two kinds of Cardinals in Mexico; one crested, which sings agreeably, and the other smaller, which sings not at all.

These birds belong to the warm climates of Mexico, Peru, and Brazil; but are rare in Guiana. Belon tells us that in his time the merchants who traded to Brazil drew considerable

Tanagra Brafilia, var. 2. Gmel.
 The Rumpless Blue and Rea Indian Sparrow, Will.

<sup>†</sup> Mr. Latham reckons the Tijepiranga to be the female of the Hooded Tanagre (Tanagra Pileata):

<sup>†</sup> This is the Tanagra Brafilia of Linnæus, the Cardinalis of Briffon, and the Brafilian Tanager of Latham. Its specific character:— It is scarlet; its wings and tail black." It is six inches and one fourth long.

profit from the importation of them. Probably the feathers were employed to ornament the robes and other dresses then in fashion, and these birds were more numerous than at present.

We may presume that when travellers talk of the warble of the Cardinal, they mean the Scarlet Tanagre; for the Crested Cardinal is of the genus of the Grosbeaks, and consequently a filent bird. With regard to this point Salerne contradicts himself in the same page. It is universally admitted that this Tanagre has an agreeable warble, and is susceptible even of instruction. Fernandez relates that it is sound particularly at Totonocapa in Mexico, and sings delightfully.

We reckon the following varieties of this species:—

First, The Spotted Cardinal\*, mentioned by Brisson, which differs from the Scarlet Tanagre only because some feathers of its back and breast are edged with green, which forms spots of the same colour, and of a crescent shape. Aldrovandus calls this The Short-tailed Blackbird.

Secondly, The Collared Cardinal †, mentioned by Briffon. It has not only the same size and colours as the Scarlet Tanagre, but the small coverts, and the edges of the quills of the wings are blue, and on each side of the neck are two great spots of the same colour, they are conti-

<sup>\*</sup> Cardinalis Nævius, Briff.

<sup>+</sup> Cardinalis Torquatus, Briff.

guous, and shaped like a crescent. But Brisson copies his descriptions of the Collared and Spotted Cardinal from Aldrovandus, who faw only the figures of these two birds, which renders their very existence doubtful. Indeed I should not have taken notice of them, did not the nomenclators infert them in their catalogues.

Thirdly, The Mexican bird which Hernandez calls The Parrot-coloured Mexican bird, and which Briffon describes under the name of Mexican Cardinal. Hernandez fays only, "This bird, from the lower part of the bill (which is fomewhat hooked, and entirely cinereous) as far as the tail, including the whole of the belly, is of a minium tinge. The same colour is spread over. the rump, and part of the back; but near thewings it receives a greenish tinge that gradually increases from thence to the neck, which is quite green. The head has an amethystine or hyacinthine tinge. The circle which furrounds, the pupil is very white, and the orbits of a deep' cœrulean. The origin of the wings is yellowish; their quills hyacinthine, and marked with a greenish streak. The tail is entirely amethystine, without any mixture of green, and more dilute near the end. The legs, which have three toes before, and one behind, are of a cinereousviolet."

These birds fly in flocks, and are easily caught with noofes, and other snares. They are readily tamed; are fat; and good to eat. "The,

# The CANADA TANAGRE.

Tanagra Rubra, Gmel. Cardinalis Canadensis, Briss. The Red Tanagre, Penn. and Lath. The Summer Red-bird, Catesby.

# Fifth Species.

This bird differs from the Scarlet Tanagre by its fize and plumage; it is smaller, and of a light slame-colour; its bill is entirely of a lead-colour, and has none of the peculiar characters; while in the Scarlet Tanagre, the upper-part of the bill is of a deep black, and the point of the lower mandible black, the rest of it white, and bellied transversely.

The Scarlet Tanagre is only found in the warmer parts of South America; as in Mexico, Peru, and Brazil. The Canada Tanagre occurs in many tracts in North America; in the country of the Illinois\*, in Louisiana†, and in Florida‡: so that there is no reason to doubt that these birds are of distinct species.

<sup>&</sup>quot;It is scarce more than an hundred leagues south of Canada that the Cardinals begin to be seen. Their song is sweet, their plumage beautiful, and their head wears a crest." CHARLEVOIX.

<sup>+</sup> Le Page Dupratz.

I "On Wednesday arrived at the port (of Havannah) A bark from Florida loaded with Cardinal-bird's skins and fruits . . . The Spaniards bought the Cardinal-birds at so high a price as ten dollars a-piece, and notwithstanding the public distress spent on them the sum of 18,000 dollars." Gemelle Carret.

# 210 THE CANADA TANAGRE.

It is accurately described by Brisson. He has properly observed, that the red colour of its plumage is much lighter than in the Scarlet Tanagre. The superior coverts of the wings, and the two quills next the body, are black; all the other quills of the wings are brown, and edged interiorly with white to their extremity; the tail consists of twelve black quills, terminated by a small border of light white; the lateral quills are rather longer than those of the middle, which makes the tail somewhat forked. [A]

[A] Specific character of the Tanagra Rubra: "It is red; its wings and tail black; its tail-quills black at the tip." Thus described by Brisson: "Its wing-quills are dusky, their inner edges white; the coverts of the wings and its tail-quills black, the margin of the latter white at the tips."

# The MISSISSIPPI TANAGRE.

Tanagra Mississippensis, Gmel.

# Sixth Species.

This is a new species. It resembles much the Canada Tanagre, only its wings and tail are not black, but of the same colour with the rest of the body. Its bill is larger and thicker than in any of the Tanagres; and also the mandibles are convex and inslated, which is uncommon even in any kind of the birds.—This character, is badly expressed in the Planches Enluminees, with

It is much inferior to the Scarlet Tanagre in. point of fong. It whiftles fo loud and fo shrill, that it would stun one in the house, and is fit. only to be heard in the fields, or the woods, "In summer," fays Dupratz, " we frequently hear this Cardinal in the forests, and in winter only on the banks of rivers after it has drank: during that season it never quits its lodgment, but guards the provisions which it has stored. Sometimes it collects as much as a Paris bushel, of maize, which it covers artfully with leaves, and then with small branches or sticks, and allows only a small opening by which to enter into its magazine." [A]

[A] Specific character :- " It is entirely red."

# The BLACK-FACED TANAGRE.

Le Camail, ou la Cravatte, Buff. Tanagra Atra, Gmel. Tanagra Melanopis, Lath.

#### Seventh Species.

This new species was presented to the king's cabinet by Sonini de Manoncour. Its plumage. is of an uniform cinereous; somewhat lighter under the belly, except the fore-part and the back of the head, of the throat, and of the top of the breast, which are spread with black. The wings and the tail are also cinereous, but deeper cast.

#### 212 THE BLACK FACED TANAGRE.

cast than the upper-part of the body; the quills of the wings are edged exteriorly with a lighter ash-colour, and those of the tail with a still more dilute shade.

This bird is the feventh of this genus in point of fize. Its total length is feven inches; the bill nine lines; the upper mandible white at the base and black at the tip, the lower is entirely black; the tail is somewhat tapered, three inches and one fourth long, and projects two inches beyond the closed wings.

It is found in Guiana in the cleared spots, but is very rare, and has been noticed by no author. [A]

[A] Specific tharacter: — "It is cinereous; the forefide of its bead and the whole of the lower part of its neck, are black."

#### The BLACK-HEADED TANAGRE.

Le Mordoré, Buff. Tanagra Africapilla, Gmel.

# Eighth Species.

This is also a new species, and presented by Sonini. It is of the same size with the preceding; its length seven inches; its head, wings, and tail, of a sine glossy black; the rest of the body gilded dark brown, deeper on the fore-part of the neck and on the breast; its legs are brown; its tail, though tapered, is three inches long,

long, and projects fifteen lines beyond the wings; the bill is black, and nine lines long.

We are totally unacquainted with its habits. It is found in Guiana, and is still more rare than the preceding. [A]

[A] Specific character of the Tanagra Atricapilla:—" It is rufous-red; its head, wings, and tail, black; with a black furrow
on the wings."

# The FURROW-CLAWED TANAGRE.

L'Onglet, Buff. Tanagra Striata, Gmel.

# Ninth Species.

The nails have on each fide a small furrow, running parallel to the edges. It was brought by Commerson, and as it resembles the Tanagres in every other respect, it is more than probable that it came from South America.

The head of this bird is striped with black and blue; the anterior part of the back is black-ish, and the posterior bright orange; the upper coverts of the tail olive brown; the upper coverts of the wings, their quills, and those of the tail, are black, edged exteriorly with blue; all the under-part of the body is yellow.

Total length near seven inches; the bill eight lines, and furrowed near the point as in the Tanagres; the tarsus nine lines, and the mid-toe the same.

P 3

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#### •214 THE FURROW-CLAWED TANAGRE.

Commerson has left no particulars with regard to its habits. [A]:

[A] Specific character of the Tanagra Striata:—"It is black, yellow below; its head striped with corrulean and black; the lowest part of its back orange."

# The BLACK TANAGRE, and the RUFOUS TANAGRE.

# Tenth Species.

Sonini informs us, that these constitute only one species, and that the one represented Pl. Enl. No. 179, fig. 2, is the male, and that of No. 711, the semale. The semale is entirely rusous, and the male entirely black, except a white spot on the top of each wing.—They are common in the cleared parts of Guiana; and, like the others, eat small fruits, and sometimes insects. Their cry is shrill, and they have no song. They appear in pairs, and never in slocks.

# The TURQUOISE TANAGRE.

Le Turquin, Buff.
Tanagra Brasiliensis, Linn.
Fanagra Brasiliensis Cærulea, Briss. and Klein,
Elototosi, seu Avis Spicæ Mayzii, Ray.

# Eleventh Species.

All the lower parts of the body, the upperpart of the head, and the fides of the neck, are deep deep or turquoise-blue; the forehead, the wings, and the tail, are black; there are also some spots of, black near the legs, and a broad bar of the same below the breast.—This bird is found in Guiana, but is not frequent.

# The RED-BREASTED TANAGRE.

Le Bec D'Argent, Buff.

Tanagra Jacapa, Linn.

Lanius Carbo, Pall.

Cardinalis Purpurea, Briff.

# Twelfth Species.

The French settlers in Cayenne have given this bird the name of Silver-Bill (Bec-d'Argent), which expresses a remarkable specific character; viz. that the base of the lower mandible extends under the eyes, and forms on each side a thick plate, which, when the bird is alive, looks like the brightest silver; but this lustre tarnishes after death. It is imperfectly represented in the Planches Enluminées. Edwards has given an excellent sigure of this bird under the name of Red-breasted Black-bird; he is deceived indeed in regard to the genus, but he has hit the discriminating seatures.

The total length is fix inches and a half, and that of the bill nine lines, which is black on the upper-

upper-part; the head, throat, and breast, are purple, and the rest of the body black, with some purple tints. The iris is brown. The female differs from the male, not only in the colour of its bill, but in those of its plumage; the upper-part of its body is brown, with some shades of obscure purple, and the under-part reddish; the tail and wings are brown.

Another discriminating character of the male, is a fort of half collar round the occiput, formed by long purple bristles, which project near three lines beyond the feathers! We are indebted to Sonini for this remark; and also for our acquaintance with this and all the other Tanagres of Guiana.

This bird is more numerous than any of the Tanagres in the Island of Cayenne and in Guiana; and it probably occurs in many other warm countries of America, for Fernandez gives the same account of a Mexican bird that frequents the vicinity of the mountains of Tepuzcullula. It feeds upon small fruits, and also upon the large pulpy produce of the bananas, &c. when they are ripe; but eats no infects. It haunts the clearest spots, and does not shun the neighbourhood of dwellings, and even visits the gardens. However, the Red-breafted Tanagres are also very common in delert tracts, and even in the glades of the forests; for in spots where the trees are levelled by the hurricanes, and where the fun darts his burning rays, there

are generally some of these birds, though always in pairs, and never in flocks.

Their nest is cylindrical, and somewhat curved, which they fasten horizontally between the branches, the entrance being below; so that the rain, from whatever direction it beats, cannot penetrate. It is six inches long, and sour inches and a half in diameter; it is constructed with straws and the dry leaves of the Indian slowering reed\*, and the bottom is well simed with broader portions of the same leaves:

it is generally fixed in the lostiest trees. The female lays two elliptical eggs, which are white, and covered at the thick end with small spots of light red, which melts away as it approaches the other end.

Some nomenclators have given this bird the name of Cardinal, but improperly nothers have supposed that there is an obvious variety in this species. In Mauduit's cabinet we saw a bird whose plumage is pale rose-colour, variegated with gray; I am rather linclined to think, that this difference is occasioned by moulting. [A]

<sup>·</sup> Canna Indica, Lina.

<sup>[</sup>A] Specific character of the Tanagra Jacapa:—" It is black, its front, throat, and breast scarlet." Thus described by Briston: Male, "dull purple; the quills of the wings and of the itail, and the thighs, glossy black," Female, "above dusky, mixed with dull purple; below tawny; the quills of the wings and of the tail dusky." The Mexican name is Chichilosoft.

#### The SAINT DOMINGO TANAGRE.

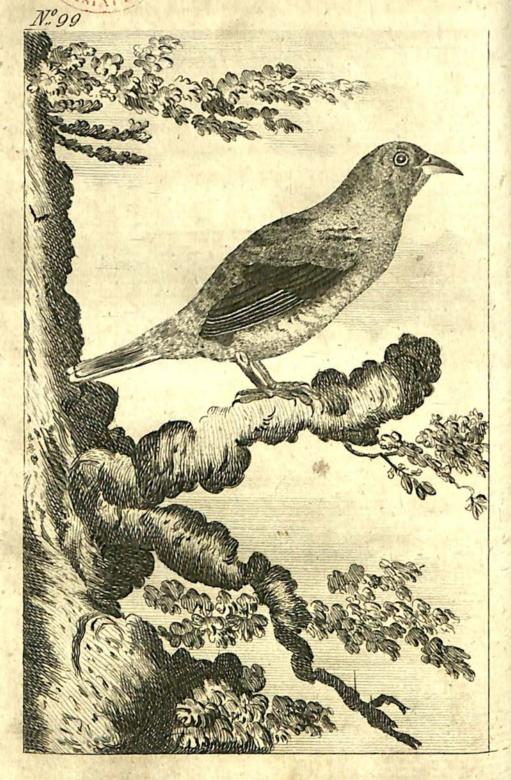
L'Esclave, Buff.
Tanagra Dominica, Linn. Gmel. and Briss.

### Thirteenth Species.

This Tanagre is called the Slave in Saint Domingo; and yet we are not told whether it can be bred in a cage, or is gentle and familiar as the name seems to import. Perhaps it owes the appellation to this circumstance:—the Crested Fly-catcher in Saint Domingo, and the Forkedtail Fly-catcher of Canada, are termed Tyrants, and are much larger and stronger than this bird, which also feeds on insects.

The Saint Domingo Tanagre bears some refemblance to the Thrushes; the colours, and particularly the speckles on the breast, are similar in both, and, like the rest of its genus, it has the upper mandible scalloped.

The head, the upper-part of the neck, the back, the rump, the scapular feathers, and the superior coverts of the wings, are of an uniform colour; all the under-part of the body is of a dirty white, varied with brown spots, that occupy the middle of each feather; the wing-quills are brown, edged exteriorly with olive, and interiorly with dirty-white; the two middle quills of the tail are brown, the rest of



THE BISHOP TANAGRE!

THE SAINT DOMINGO TANAGRE. 219 the same colour, with an olive border on their inner-side; the tail is somewhat forked; the legs are brown. [A]

[A] Specific character of the Tanagra Dominica: — "It is "fpotted with black, above dufky-olive, below whitish." Thus described by Brisson: "Above dufky, below dirty-white, variegated with dufky longitudinal spots; the quills of its wings and of its tail dufky, their outer-edges olive."

### The BISHOP TANAGRE.

Le Bluet, Buff. Tanagra-Episcopus, Linn. Gmel. Brist, and Saler. The Syacu, Edw.

#### Fourteenth Species.

It is larger than those which form the second division of Tanagres\*. In the male, all the upper-part of the body is bluish-gray; and in the semale, all the upper-part of the head is of a yellowish-green, and all the upper-part of the body, the back, the upper surface of the quills, the wings, and of the tail, olive-brown, glossed with violet; the broad bar on the wings, which is light-olive, is distinguished from the brown on the back.

<sup>\*</sup> Some sentences are omitted here containing the author's reasons for rejecting the appellation given this bird of Cayenne Bilbop, and for adopting that of Bluet.

These birds are very common in Cayenne; they haunt the skirts of the forests, plantations, and places that have been long cleared, where they feed upon small fruits. They are never feen in large bodies, but always in pairs. lodge at night among the leaves of the palmtrees, at their junction, near the stem, and make nearly the same noise that our Sparrows do among the willows; for they have no fong, and their cry is sharp and unpleasant.

[A] Specific character of the Tanagra-Episcopus :- It is cinereous, its wings and tail coerulean externally."

#### The RED-HEADED TANAGRE.

· Le Rouge-Cap, Buff. Tanagra Gularis, Linn. Gmel. Cardinalis Americanus, Briff.

# Fifteenth Species.

The head is tinged with a beautiful red; all the upper-part of the body is of a fine black; - it has a narrow long fpot of black on the breaft, with purple speckles; the legs and the upper mandible black; the lower mandible, yellow at the base and black at the tip.—The species is not very common in Guiana; nor are we certain whether it is found any where else.

[A] Specific character of the Tanagra Gularis: - It is black. white below, its head red, its throat purple." Thus described by Brisson: " Above glossy black, below snowy; the head and The upper-part of the throat scarlet; the tail-quills blackish."

#### The GREEN TANAGRE.

Le Tanagra Vert du Bresil, Bust. Tanagra Virens, Linn. and Gmel. Tanagra Brasiliensis Viridis, Brist.

### Sixteenth Species.

This bird, which we know only from Brisson's description, is larger than the House-Sparrow: all the upper-part of the body green; on each side of the head is perceived a black spot between the bill and the eye, under which is a bar of very brilliant beryl, that extends quite along the lower mandible; the smallest superior coverts are of a very brilliant sea-green, the others green.

The throat is of a fine black; the lower-part of the neck yellow, and all the rest of the underpart of the body yellowish-green; the wings, when closed, appear of a green running into blue; the quills of the tail the same colour, except the two intermediate ones, which are green.

Brisson, to whom we are indebted for what we know of this bird, tells us, that it is found in Mexico, Peru, and Brazil. [A]

<sup>[</sup>A] Specific character of the Tanagra Virens:—" It is green, yellow below, its straps and throat black, with a blue stripe on its jaw."

# The OLIVE TANAGRE.

L'Olivet, Buff.
Tanagra Olivacea Gmel.

#### Seventeenth Species.

We have given this name, because the plumage is of an olive-green, deeper on the upperpart of the body, and lighter on the under; the great quills of the wings have a still darker! shade, for they are almost brown, and shew only greenish reslections.

Its length is almost fix inches, and its wings' reach to the middle of the tail.—It was brought's from Cayenne by Sonini de Manoncour. [A]

[A] Specific character of the Tanagra Olivacea:—" It is olive, its throat and breast yellow, its belly white; the quills of its wings and tail dusky, white at the edge." It is found also in New York.

The seventeen preceding species form what we call the Great Tanagres:—we shall now deferibe those which are of the medium size and which are not so numerous.

### The BLACK and BLUE TANAGRE.

Le Tanagra Diable-Enrhumé, Buff. Tanagra Mexicana, Linn. and Gmel Tanagra Cayanenfis Cærulea, Briss. The Black and Blue Titmouse, Edw.

## First Middle Species:

The Creoles of Cayenne call this The Rheum-Devil: its plumage is mixed with blue, yellow, and black; the upper-part and fides of the head, the throat, the neck, and the rump, and the 'anterior part of the back, are black, without any tinge of blue; the small coverts of the wings are of a fine sea-green, and at the top of the wing take a violet cast; the last of these small coverts is black, terminated vith violet-blue; the quills of the wings black; the large ones (the first excepted) are edged exteriorly with green as far as the middle; the great coverts are black, edged exteriorly with violet-blue; the quills of the tail are black, flightly edged on the outfide with blue-violet, as far as their ends; the first quill on each side has not this border, they are all gray below; a light yellow coppercolour is spread on the breast and belly, the sides of which and the coverts of the thighs are interspersed with black feathers tipt with violet-blue. and also with some yellow feathers spotted with black.

#### 224 THE BLACK AND BLUE TANAGRE.

Total length five inches and a half; the bill fix lines; the tail an inch and ten lines, and firetches an inch beyond the wings.—It is found in Guiana, but is not frequent:—we are unacquainted with its history.

Brisson thinks that this bird is the Teoauhtototl of Fernandez; but this naturalist only says, that it is about the size of a Sparrow, its bill short, the upper-part of the body blue, and the under yellowish white, with black wings: from a description so incomplete, it is impossible to decide the identity. Fernandez adds, that the Teoauhtototl frequents the valleys and hills of Tetzocan in Mexico; that it is good eating; that its song is unpleasant; and that it is not bred in houses. [A]

[A] Specific character of the Tanagra Mexicana: — "It is black, below yellowish, its breast and rump blue." Thus deferibed by Brisson: "Above glossy-black, below yellowish-white, the sides spotted with black and blue; the head, the lower-part of the neck, the breast, and the rump blue; the quills of the tail glossy-black."

#### The GRAY-HEADED TANAGRE.

Le Verderoux, Buff.
Tanagra Guianensis, Gmel.

# Second Middle Species.

The whole plumage of this bird is greenish, except the front, which is rusous from both sides,

9. • on

on which two bars of the same colour extend from the front to the rise of the red; the rest of the head is ash-gray.

Total length five inches and four lines; that of the bill seven lines, and that of the legs eight lines: the tail is not tapered, and the wings, when closed, do not quite reach the middle.

We are indebted to Sonini de Manoncour for this species, which is new. It is found in the extensive forests of Guiana; -but we are unacquainted with its history.

# The RUFOUS-HEADED TANAGRE\*.

Le Passevert, Buff. Tanagra Cayana, Linn! and Gmel. Tanagra Cayanensis. Viridis, Brist. .

The upper-part of the head is rufous; the upper-part of the neck, the lower-part of the back and the rump are of a pale-gold yellow, shining like raw filk, and in certain positions there appears a delicate tint of green; the fides of the head are black; the higher-part of the back, the scapular feathers, the small superior coverts of the wings and those of the tail are green.

The throat is blue-gray; the rest of the under-part of the body shines with a confused

This bird was by mistake ranked among the Sparrows: it is now restored to its proper place.,

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#### 226 THE RUFOUS-HEADED TANAGRE,

mixture of pale-gold yellow, rufous, and bluegray, and each of these predominates according to the light in which the bird is viewed; the quills of the wings and of the tail are brown, with a border of gold-green \*.

In the female, the upper-part of the body is green, and the under of a dull-yellow, with some greenish reflexions.

These birds are very common in Cayenne, where the Creoles call them Dauphinois; they inhabit only the cleared tracts, and even come near the plantations; they feed on fruits, and destroy vast quantities of bananas and Indian pears; they consume also the crops of rice when in maturity; the male and semale commonly follow each other, but they do not sly in slocks, only a number of them is sometimes seen together among fields of rice.—They have no song or warble, and only a short shrill cry. [A]

<sup>\*</sup> In some individuals, the rusous at the top of the head defends much lower on the neck; in others, this colour extends on the one hand upon the breast and the belly, and on the other, upon the neck and all the upper-side of the body, and the green of the wing-feathers has a changing blue cast.

<sup>[</sup>A] Specific character of the Tanagra Cayana: — "It is fulvous, its back green, its cap rufous, its cheeks black."

# [ 227 ]

# V A R I E T Y.

Le Paffe-Vert à Tête Bleue, Buff.

Linnæus describes a bird resembling much the preceding. The fore-part of the neck, the breast, and the belly are golden-yellow; the back greenish-yellow; the wings and the tail green, without any mixture of yellow. It differs however in having its head of a bright blue.

# The GREEN-HEADED TANAGRE.

Le Tricolor, Buff. Tanagra Tricolor, Gmel. Yanagra Cayanensis waria Chlerocephalos, Briff.

# Fourth Middle Species.

Brought from Cayenne by Sonini. The plumage confifts of three colours; red, green, and blue, which are all very bright. The two birds represented in N° 33 of the Planches Enluminees, seem to belong to the same species, and perhaps differ only in sex; for in the one the head is green and in the other blue; in the former, the upper-part of the neck is red, and in the latter green:—and these are almost the sole differences.

We

#### 228 THE GREEN-HEADED TANAGRE.

We have seen in the cabinet of M. Aubri, Rector of St. Louis, one of these in high preservation, and said to have come from the Straits of Magellan; but it is not very probable that the same bird should inhabit the torrid climate of Cayenne, and the dreary frozen tracts of Patagonia.

# The GRAY TANAGRI.

Le Gris-Olive, Buff. Tanagra Grisea, Gmel.

### Fifth Middle Species.

The under-part of the body is gray, the upper olive. It occurs both in Guiana and Louisiana.

#### The PARADISE TANAGRE.

Le Septicolor, Buff.
Tanagra Tatao, Linn. and Gmel.
Avicula de Tatao, Seba.
Tanagra, Ray, Will. and Briff.
The Titmouse of Paradise, Edw.

### Sixth Middle Species.

The plumage is variegated with feven colours: fine green on the head, and the small superior coverts of the wings; glossy black on the upper-parts of the neck and back, on the middle quills of the wings, and on the upper furface of the quills of the tail; brilliant fire-colour on the back; orange-yellow on the rump; violet-blue on the throat, the lower-part of the neck, and the great superior coverts of the wings; deep gray on the under-surface of the tail; and, lastly, fine sea-green on all the under-part of the body from the breast. These colours are all exceedingly bright, and well defined.

It does not assume the vivid red on the back till grown up, and the female never has that colour; the lower-part of her back too is orange like the rump, and in general her tints are more dilute, and not so distinctly defined as those of the male.—But there is still some diversity in the disposition of the colours; some males have the bright red on the rump as well as on the back; and in many others both the back and rump are entirely of a gold colour.

The male and female are nearly of the same size, being five inches long; the bill only six lines, and the legs eight lines; the tail is somewhat forked, and the wings reach to the middle of it.

These birds appear in numerous flocks. They feed upon the tender half-formed fruits which grow on a certain large tree in Guiana. They arrive in the island of Cayenne when this tree is in blossom, and depart soon afterwards, penetrating probably into the interior parts of the country when the same fruits are later in coming to maturity. They make their appearance in

the inhabited parts of Guiana commonly about the middle of September, and stay about six weeks; they return again in April or May. Indeed they seem to seek always the same food; and when any of those trees is in blow, we may certainly expect to find a number of these birds.

They breed not during their residence in Guiana. Marcgrave tells us that in Brazil they are kept in the cage, and sed on meal and bread. They have no warble, and their cry is short and sharp.

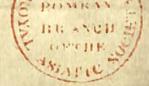
We must not with Brisson range the Tolar with this species; for the description given by Seba is not at all applicable to it: "The Talao," says Seba, "has its plumage beautifully variegated with pale green, with black, with yellow, and with white; the feathers of the head and breast are finely shaded with pale green, and with black; and the bill, the legs, and the toes, are deep black." Besides, what demonstratively proves it to be not the same bird, the author adds, that it is very rare in Mexico; whereas the Paradise Tanagres we have seen arrive there in very great numbers.

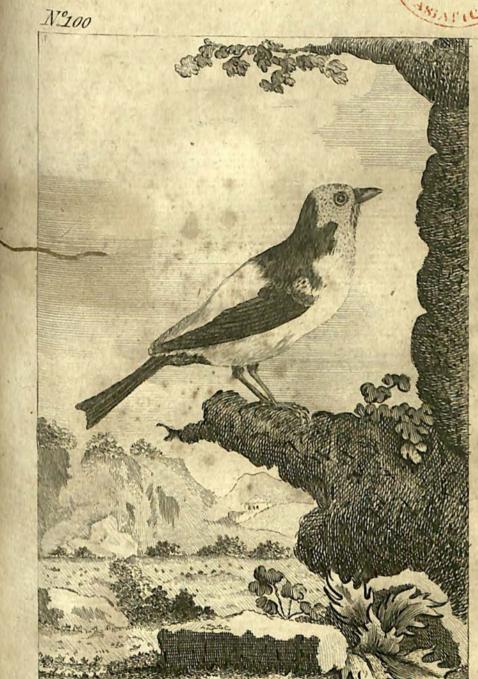
### The BLUE TANAGRE,

Tanagra Mexicana, var. Gmel. Tanagra Barbadensis Cærula, Brist.

### Seventh Middle Species.

Its head, throat, and the under-part of the neck, are of a fine blue; the back of the head,





THE SMALL TANAGRE.

the upper-part of the neck, the back, the wings, and the tail, black; the superior coverts of the wings black, and edged with blue; the breast, and the rest of the under-part of the body, fine white.

On comparing this with what Seba calls the American Sparrow, they appear to be the same, differing only perhaps in age and sex. Brisson seems to have amplified the imperfect account of Seba; but as he does not produce his authorities, we cannot lay any weight on his description.

Seba's bird came from Barbadoes; ours from Cayenne.

# The BLACK-THROATED TANAGRE.

# Eighth Middle Species.

This species is new. It was found in Guiana, and brought home by Sonini de Manoncour.

The head, and all the upper-part of the body, olive-green; the throat black; the breast orange; the sides of the neck, and all the under-part of the body, sine yellow; the superior coverts of the wings, the quills of the wings, and of the tail, brown, and edged with olive; the upper mandible black, the lower gray; and the legs blackish.

#### The HOODED TANAGRE.

La Coiffe Noire, Buff. Tanagra Pileata, Gmel.

### Ninth Middle Species.

The total length of this bird is four inches and ten lines; its bill is black, and nine lines long; all the under-part of the body is white, flightly varied with cinereous; the upper-part of the head is gloffy black, which extends on each fide of the neck in a black bar, diffinctly marked on the white ground of the throat, which makes the bird look as if it were hooded with black. The quills of the tail are not tapered, and are all twenty-one lines long, and extend an inch beyond the wings; the legs are nine lines long.

The Tiyepiranga of Marcgrave, which Brisson terms the Cinereous Tanagre of Brazil, would resemble this bird exactly, if Marcgrave had mentioned the black hood: and this renders it probable that the one which we have described is the male, and that of Marcgrave the female of the same species.

They are found in Brazil and Guiana; but we are not acquainted with their history.

#### SMALL TANAGRES.

The middle-fized Tanagres which have been above enumerated, are in general not larger than a Linnet.—Those which we are going to describe are sensibly smaller, and exceed not the fize of a Wren.

#### The RED-HEADED TANAGRE.

Le Rouverdin\*, Buff.

Tanagra-Gyrola, Linn. and Gmel.

Tanagra Peruviana Viridis, Briff.

Fringilla Pestore Carulco, Klein.

Fringilla Viridis, Capite Spadiceo, Act. Petr.

The Red-keaded Greenfinch, Edw.

#### First Small Species.

Its head is green; its body entirely rufous, except a light blue spot on the breast, and a yellow spot on the top of the wing.

This species appears in many parts of South America; in Peru †, Surinam ‡, and Cayenne. It would seem that it migrates, for it is not found in the same place the whole year. It arrives in Guiana twice or thrice annually, to feed upon small fruit that grows on a large tree, on which it perches in flocks; and again departs, probably after the provisions are consumed. As these birds are not frequent, and always avoid

<sup>\*</sup> Formed from Roux-verd. , † Edwards. † Briffonthe

#### 234 THE RED-HEADED TANAGRE.

the cleared and inhabited fpots, their habits have not been observed. [A]

[A] Specific character of the Tanagra-Gyrola:—" It is green, its head red, its collar yellow, its breast blue."

#### The SYACU TANAGRE.

Second Small Species.

The two birds represented in the *Planchës* Enluminées, No. 133, fig. 1, No. 301, fig. 1, seem to belong to the same species, and differ perhaps only in the sex. It is likely that the whitebellied one is the semale, and the green-bellied one the male.

We give them the name of Syacou, contracted from the Brazilian appellation Sayacou; for we have no doubt that what Brisson terms the Variegated Tanagre of Brazil is the same kind.

These two birds were brought from Cayenne, where they are rare. [A]

[A] The last of these birds is the Tanagra-Syaca of Gmelin, the Tanagra Brasiliens is Varia of Brisson. Its specific character:—
"Hoary, its wings somewhat blue." The first is the Tanagra Punctata of Gmelin, the Tanagra Viridis Indica Punctata of Brisson, and the Spotted Tanager of Latham. Its specific character:—
"Green, dotted with black; below yellowish white."

#### The ORGANIST.

### Third Small Species.

Such is the name this little bird receives at St. Domingo; because it sounds all the notes of the octave, rifing from the base to the treble. This fort of fong, which implies that the ear of this bird is organized fimilarly to the human ear, is not only fingular, but very pleafant. The Chevalier Fabre Deshayes has informed me in a letter, that in the fouth of St. Domingo on the high mountains, there is a small bird very rare and famous, called the Musician, whose fong can be written. We presume that this is the same with the Organist. But still we should doubt of the regular succession of musical sounds; for we had not the bird alive. It was presented by the Count de Noë, who had brought it from the Spanish district of St. Domingo, where he told me it was very rare, and difficult to discover, or to shoot; because it is shy, and artfully con-. ceals itself; it even turns round the branch as the hunter changes place, to elude his view: fo that though there be feveral of these birds on a tree, it often happens that not one of them can be perceived.

The length four inches; the plumage blue on the head and neck; the back, the wings, and the tail, are stained with black, running into into coarse blue; the forehead, the rump, and all the upper-part of the body, coloured with orange-colour.—This short description is sufficient to discriminate it.

We find in Dupratz's History of Louisiana, the description of a small bird which he calls Bishop, and which we believe to be the same with the Organist. "The Bishop is a bird smaller than the Canary; its plumage is blue, verging on violet.—It feeds on many sorts of small seeds, among these widlogouil and choupichoul, a kind of millet peculiar to the country. Its notes are so slexible, its warble so tender, that when we once hear it, we become more reserved in our eulogiums on this nightingale. Its song lasts during a Miserere, and during the whole time it never makes an inspiration; it rests twice as long before it renews its music, the whole interval elapsed being about two hours."

Though Dupratz does not mention whether it gives the notes of the octaves as the Organist is faid to do, we cannot doubt their identity; for the colours and fize are the fame in both. The Scarlet Tanagre, which resembles it in point of song, is twice as large; and the Arada, which has also a charming warble, is entirely brown. The Organist is then the only bird to which it can be referred.

# The JACARINI TANAGRE.

Le Jacarini, Buff.
Tanagra Jacarina, Linn. and Gmel.
Tanagra Brafiliensis Nigra, Briff.
Carduelis Brafiliana, Will. and Edw.

### Fourth Small Species.

This bird was called Jacarini by the Brazilians. Marcgrave mentions it, but takes no notice of its However, Sonini de Manoncour, who habits. observed it in Guiana, where it is very common, informs us that it prefers the cleared grounds, and is never feen in the large forests; that it lodges in the low trees, particularly the coffeetree, and is diffinguished by a fingular circumstance, viz. that it springs from the branch on which it has perched a foot, or a foot and a half vertically, and falls back to the same spot; and thus continues to rife and fink alternately, till it removes to another bush, where it repeats the · same exercise. Each leap is attended with a feeble cry, expressive of pleasure, and by an expansion of the tail. This would seem to be the mode in which the male courts the female; which on the contrary remains at eafe, or hops about like other birds. The nest is composed of dry herbs of a gray colour; it is hemispherical, and two inches in diameter; the female deposits in it two elliptical eggs, seven or eight lines long, and of a greenish white, sprinkled with

with small red spots, which are numerous, and fpread most profusely near the big end.

The Jacarini is easily known by its colour, which is black, and shining like polished steel, and uniform over the whole body, except only in the male the interior coverts of the wings, which are whitish; for the semale is entirely gray, and differs so much in plumage that it might be taken for a different species. The male also becomes gray in the moult. [A]

[A] Specific character of the Tanagra Jacarina: - "It is blacked violet, its wings whitish below, its tail wide-forked."

#### The GOLDEN TANAGRE.

Le Teité, Buff. Ray, and Will.

Tanagra Violacea, Linn. Gmel. Borowsk, &c.

Tanagra Brasiliensis Nigro-Lutea, Briss.

The Golden Titmouse, Edw.

### Fifth Small Species.

It is called *Teité* in its native region of Brazil. The female differs widely from the male; for the upper-part of the body is olive-green; the forehead, and the under-part of the bill, tinged partly with yellow, and partly with olive-yellow: whereas in the male the body is of a deep blue; and the forehead, the under-part of the throat and belly, fine yellow.

In the young bird the colours are fomewhat different. The upper-part of the body is olive, fprinkled

fprinkled with some feathers of a deep blue; and on the front the yellow is not distinctly marked. The feathers are only gray, with a little yellow at the tips; the under-side of the body is of as fine a yellow in the young bird as in the adult.

The same changes of plumage are observed in this as in the preceding species. The nest is also very like that of the Jacarini, only it is not of so close a texture, and is composed of reddish herbs instead of gray. There is a variety of it, which, as well as the species, is called Little Louis by the Creoles of Cayenne. They are both very common in Guiana, Surinam, and Brazil; they frequent the ground cleared near the farm-house, and feed on the small fruits which they find on the bushes; they light in great numbers among rice-crops, which must be guarded against their visits.

They may be bred in the cage, where they are pleasant, if five or fix be put together. They whistle like the Bullfinch, and are fed on the plants called in Brazil Paco and Mamao. [A]

<sup>[</sup>A] Specific character of the Tanagra Violacea: -" It is violet; below very yellow."

#### The NEGRO TANAGRE.

Le Tanagra Nègre, Buff. Tanagra Cayanensis, Gmel. Tanagra Cayana, Linn. Tanagra Cayanensis Nigra, Briss.

### Sixth Small Species.

This bird is of fo deep a blue as to appear quite black, and it requires a close inspection to perceive some blue reflexions on its plumage; it has an orange-spot on each side of the breast, but covered by the wing; so that the general appearance is uniform black.

It is of the same size with the preceding, and inhabits the same countries, but is much rarer in Guiana. [A]

[A] Specific character of the Tanagra Cayanenfis:—" It is shining black; both sides of its breast, and its wings, yellow."

These are all the Great, the Middle-sized, and the Small Tanagres, whose species can be ascertained with accuracy. A few remain that have been described by Brisson, but on the credit of authors whose accounts are vague and incorrect: I shall, however, enumerate them, without pretending to decide the species.

First, The Grass bird, or Xiuhtototl of Fernandez. All the body is blue, scattered with some fulvous feathers; those of the tail black, and tipt with

with white; the under-part of the wings cinereous, the upper-part variegated with blue, with fulvous and with black; the bill short, somewhat thick, and of a rusty white; the legs are gray.

This author adds, that it is somewhat larger than our House-sparrow, that it is good eating, that it is raised in the cage, and that its song is not unpleasant.—It is impossible from such an impersect account to decide whether it belongs to the genus of Tanagres. [A]

Secondly, The Mexican Bird of Seba, of the fize of a Sparrow. The whole body is blue, varied with purple, except the wings, which are varied with red and black; the head is round; the eyes and the breast are covered above and below with a blackish down; the inferior coverts of the wings, and of the tail, are yellowish ash-colour. It is ranged among the singing birds.

So vague an account cannot warrant us to conclude that it belongs to the genus of the Tanagres; for the only points of analogy are that it inhabits Mexico, and is of the fize of a Sparrow: and Seba's figure, as indeed all those of that author, can convey no distinct idea.

Thirdly, The Brazilian Guira-Perea of Marcgrave. It is about the bulk of a Lark; its bill black, short, and rather thick; all the upperpart of the body, and the belly, of a deep yel-

<sup>[</sup>A] This is the Carulean Tanagre of Latham, the Tanagra Canora of Gmelin, and the Tanagra Carulea Nova Hispania of Brisson.

low, spotted with black; the under-part of the head and neck, the throat, and the breast, black; the wings and tail composed of quills of blackills brown, and some edged exteriorly with given; the legs are of a dull cinereous.

It does not appear from this thert description whether this bird ought to be referred to the Bulfinches or to the Tanagres. [A].

Fourthly, The Bird smaller than the Goldsinch, or the Quatoztli of Brazil, according to Seba. The half of its head is decorated with a white crest; the neck is of a light red, and the breast of a fine purple; the wings deep red and purple; the back and the tail yellowish black, and the belly light yellow; the bill and legs are yellow. Seba adds, that it inhabits the mountains of Tetzocano in Brazil.

We shall observe, sirst, that the name Quatoztli, which Seba gives to this bird, is not Brazilian, but Mexican; and secondly, that the mountains of Tetzocano are in Mexico, and not in Brazil. It is probable therefore that he was mistaken in calling it a Brazilian bird.

Lastly, from the description and the figure given by Seba, we should rather range this bird in the genus of the Manakins than in that of the Tanagres. [B]

<sup>[</sup>A] This is the Yellow Tanagre of Latham, the Tanagra Flave of Gmelin, and the Brafilicafis of Brisson.

<sup>[</sup>B] This is the White-beaded Tanagre, or Tanagra Albifrous of Latham, the Tanagra Leucocephala of Gmelin, and the Tanagra Brafiliensis Leucocephalus of Briston.

Fifthly, The Calatti of Seba, which is nearly of the fize of a Lark, and has a black crest on the head; and the fides of the head, and the breaft, of a fine fky-colour; the back is black, variegated with azure; the superior coverts blue, with a purple spot; the quills of the wings variegaled with green, with deep blue, and with black the rump variegated with pale blue and green, and the belly with snowy white; the tail is of a beautiful form, brown terminated with rufous.

Seba adds, that this bird, which was fent from Amboyna, is of an elegant figure (his plate is a very bad one), and that its fong is also pleasant. This is enough to exclude the Calatti from the Tanagres, which are found only in America, and in no part of the East Indies. [A]

Sixthly, The Anonymous Bird of Hernandez. The upper-part of its head is blue; the upperpart of the body is variegated with green and black, the under-part yellow, and spotted with white; the wings and the tail are deep green, with spots of lighter green; the legs are brown, and the toes and nails very long.

Hernandez subjoins in a corollary, that this bird has a black-hooked bill, and that if it were more curved, and if the toes were placed as in the parrots, he should not hesitate to regard it as a real parrot.

<sup>[</sup>A] This is the Amboina Tanagre of Latham, the Tanagra Amboinensis of Gmelin, and the Tanagra Amboinensis Carulea of Briffon. From

From these indications, we should refer this! bird to the Shrikes.

Seventhly, The Brown Cardinal of Briffen, which is a tropic bird, and not a Tanagram [A]

[A] This is the Military Tanagra of Latham, the Greater P. lineb or Shirley of Edwards, the Tanagra Militaris of Linnean and Gmelin, and the Cardinalis Fusin of Briston.

#### The SILENT BIRD\*.

We cannot refer this bird to any genus, and we place it after the Tanagres only because its exterior appearance is similar; but its habits are totally different. It never appears in the cleared spots, and remains always alone in the heart of the forests far from settlements, and has no song or cry. It rather hops than slies, and seldom rests on the lowest branches of the bushes, for it commonly continues on the ground. It resembles the Tanagres, however, in the shape of its body and feet, and in the slight scalloping on both sides of the bill, which is longer than the bill of the Tanagres.—It is a native of the same climate of America.

<sup>\*</sup> Latham ranges it with the Tanagres with the epithet Silens. Its specific character:—" It is green; its head, and the under" part of its body, hoary; its eye-brows, a fillet on its eyes, and
" a stripe on its throat, black."



THE BUNTING.

# The ORTOLAN BUNTING \*.

L'Ortolan Buff.

Emberiza Hortulana, Linn. Gmel. Fris. Mull.

Hortulanus, Bris. Aldrov. &c.

Ortolano, Zilan. and Olin.

It is very probable that our Ortolan is no other than the Miliaria of Varro, so called because it was fattened with millet seeds: it seems also to be the same with the Cenchramus † of Aristotle and Pliny, which is evidently derived from Keyxpos, that likewise signifies millet. And these etymological conjectures acquire force, from the correspondence between the properties of these birds.

- 1. The Cenchramus is a bird of passage, which, according to Aristotle and Pliny, accompanies the Quails; in the same way as the Rails, the Snipes, and other migratory birds ‡.
- 2. The Cenchramus utters cries during the night; which has given to these naturalists occasion to say, that it continually calls to the

<sup>\*</sup> In German, Fet-Ammer (Fat-Bunting), Jut-Vogel; in Polish, Ogrodniczek.

<sup>†</sup> Aristotle spells the name Κυγχεμιος, not Κιγχαμιος; Pliny indeed writes it both Cynchramus and Cenchramus: yet the etymology given in the text seems doubtful.

<sup>‡</sup> Hist. Anim. Lib. viii. 12.—Hist. Nat. Lib. x. 23.

companions of its journey, and encourages them to advance.

3. Lastly, in the time of Varro, the Miliaria, as well as the Quails and Thrushus, were futtened, and sold at high prices to the luxurious.

All these properties belong to our Ortolan: -It is a bird of passage, which a multitude of naturalists and of fowlers admit: it fings, during the night, as Mrasher, Frisch, and Salerne affirm †: and lastly, when fat, it is esteemed a delicious morsel 1. The Ortolans are not always caught fat; but there is an infallible method to bring them into that state. They are shut up in a room from which the external light is excluded, but which is constantly illuminated with lanthorns, fo that they cannot diffinguish the night from the day: they are allowed to run about and pick up the oats and millet that are regularly feattered in the apartment. With this regimen they foon grow excessively fat, and if not prevented would even die of extreme corpulence . When killed at the proper time, they are most delicate, delici-

- \* De Re Rustica, Lib. iii. 5.
- † I could cite also the Sieur Burel, gardener at Lyons, who has fometimes above an hundred Ortolans in his volery, and who communicated to me, or confirmed, many peculiarities of their history.
- 1 It is pretended those caught in the plains of Toulouse are better slavoured than those of Italy. In winter they are very scarce, and consequently very dear: they are dispatched to Paris by post in a small trunk silled with millet, according to the historian of Languedoc, tone i. p. 46; in the same manner as they are sent from Bologna and Florence to Rome in boxes sull of corn, according to Aldrovandus.
- § It has been faid that they are fometimes fattened to weighthree ounces.

ous balls of fat, but rather too luscious, and apt to cloy.—Thus Nature guards against intemperance by the satiety and disgust which constantly attend the excess of pleasure.

The fat Ortolans are easily dressed in the water-bath, the sand-bath, in hot ashes, &c. And they may be also very well prepared in the shell of a real or an artificial egg, as was formerly practised with the beccasigos or epicurean warblers \*.

It cannot be denied that the delicacy of their flesh, or rather of their fat, has contributed more to their celebrity, than the charms of their warble. However, when kept in the cage, they have a fong like that of the Yellow Bunting, which, as I have already observed, they repeat night and day. In countries where they are numerous, and consequently well known, as in Lombardy, they are not only fattened for the table, but trained to fing; and Salerne observes that there is a sweetness in their notes. In this case they are better treated, and not being suffered to grow corpulent, their lives are prolonged. are kept a confiderable time beside other birds, they adopt fomething of their fong, especially when they are young; but I know not whether they ever learn to articulate words, or catch the notes of our mulic.

These birds make their appearance at the same time with our Swallow, or a little after, and they

<sup>\*</sup> Petronius.

either accompany or precede the Quails. They enter Lower Provence, and advance as far as Burgundy, especially in the warm districts, which are planted with vineyards; however, they touch not the grapes, but eat the infests that prey upon the leaves and tendrils, of the vinca. On their arrival, they are rather lean, because then is the season of their loves. They build in the vines, and their nests are pretty regular, and fimilar to those of the lark: they lay four or five grayish eggs, and have commonly two hatches in the year. In other countries, as in Lorraine, they place their nests on the ground, and prefer the corn-fields.

The young family begins to direct its course to the fouthern provinces as early as the first of August; but the parents do not commence their journey before the end of September. remove into Fores, and halt in the neighbourhood of St. Chaumont and St. Etienne; they alight among the oats, of which they are very fond, and remain till the cold weather begins to fet in; during which time they become fo fat and inactive, that they might be knocked down with sticks. At this time they are proper for the table, especially the young ones; but they are more difficult to preserve than those which are caught in their first entrance. Bearn also, the Ortolans appear twice annually; passing in May, and repassing in October.

Some

<sup>\*</sup> They may however be fatted at this time, by feeding them first with oats, then with hemp-seed, with millet, &c.

Some have supposed these birds to be natives of Italy, whence they spread into Germany and other countries; and this is not improbable; for though they breed at present in Germany, they are caught promiscuously with the Buntings and Chassinches\*; but Italy has been cultivated from a more remote antiquity. Besides, it is not uncommon for these birds, when they discover a suitable country, to adopt it and settle in it. Not many years since, they were thus naturalized in a small district of Lorraine, lying between Dieuse and Mulée; where they breed, raise their young, depart in the fall, and return again in the spring †.

But their journies are not confined to Germany; Linnæus relates that they inhabit Sweden, and fixes the month of March for the period of their migration ‡. We must not however suppose that they are spread through all the countries between Sweden and Italy: they return constantly into our southern provinces; sometimes their course lies through Picardy, but scarcely are they ever seen in the northern part of Burgundy where I live, in Brie, or in Switzerland, &c. § They may be caught either with the noose, or with limed-twigs.

<sup>\*</sup> Frisch.—Kramer ranks them among the birds which occur in Lower Austria; and he adds, that they live in the fields, and perch upon the trees which grow in the midst of meadows.

<sup>†</sup> Dr. Lottinger.

<sup>‡</sup> Fauna Succica.

<sup>§</sup> Gesner.

In the male, the throat is yellowish, edged with cinereous; the orbits also yellowish; the breast, the belly, and the fides rufous, with some speckles, whence the Italian name Tordino \*; the lower coverts of the tail of the same colour, but lighter; the upper-part of the body variegated with brownchesnut, and blackish; the rump and the superior part of the coverts of the tail, uniform brownchesnut; the quills of the wings blackish, the large ones edged exteriorly with gray, the middle ones with rufous; their superior coverts variegated with brown and rufous; the inferior ones with fulphur-yellow; the quills of the tail blackish, edged with rust, the two outer ones edged with white; laftly, the bill and legs are yellowish.

The female has rather more cinereous on the head and on the neck, and no yellow fpot below the eye; but, in general, the plumage of the Ortolan is subject to many varieties.

The Ortolan is smaller than the House Sparrow. Length, from six inches and one-fourth, to five inches and two-thirds; the bill five lines; the leg nine lines; the middle toe eight lines; the alar extent nine inches; the tail two inches and a half, consisting of twelve quills, and projecting eighteen or twenty lines beyond the wings. [A]

<sup>\*</sup> From Tordo, .a Thrush.

<sup>[</sup>A] Specific character of the Ortolan, Emberiza-Hortulana:—

Its wing-quills dusky, the first three whitish at the margin; the

st tail-quills dusky, the two lateral ones black exteriorly." It is fix inches and one fourth long. It builds in low bushes, or on the ground, a nest like that of the Sky-lark, and lays four or five gray eggs.

### VARIETIES of the ORTOLAN.

I. The YELLOW ORTOLAN. Aldrovandus, who observed this variety, says that its plumage was straw-coloured, except the wing-quills, which were tipt with white, and the outermost edged with the same colour: another peculiarity, the bill and legs were red.

II. The WHITE ORTOLAN. Aldrovandus compares its whiteness to that of the swan, and says, that all its plumage was uniformly the same. Burel of Lyons, who has long been employed in raising Ortolans, assures me that he has seen some grow white from age.

III. The BLACKISH ORTOLAN. Burel has feen others, which were undoubtedly of a different character from the preceding, and which became blackish as they grew old. In the one observed by Aldrovandus, the head and neck were green with a little white on the head and on two quills of the wing; the bill was red, and the legs cinereous; all the rest was blackish.

# 252 VARIETIES OF THE ORTOLAN.

IV. The WHITE-TAILED ORTOLAN. It differs from the common Ortolan by the colour of its tail, and by the tints of its plumage, which are fainter.

V. I have observed one, in which the throat was yellow, mixed with gray; the breast gray, and the belly rusous.

M

# The REED BUNTING\*.

L'Ortolan de Roseaux, Buff. Emberiza Schæniclus, Lin. Gmel. Brun. Kram. &c. Passer Torquatus, seu Arundinaceus, Ray, Will. Briss. Emmerling, Gunth. Nest.

I JPON comparing the different birds of this family, I have perceived fo many striking relations between that of the present article and those of the four following, that I should have referred them all to the same species, if I could have collected a sufficient number of facts to justify this innovation. It is extremely probable that all these would propagate with each other, and that the cross-breed would be prolific. But still I observe that they continue for a length of time in the same country without intermixing; that they retain their discriminating characters; and that their instincts are not quite the same. I shall therefore follow the common division, but protest against the multiplication of the number of species, which is so fertile a source of error and confusion.

<sup>\*</sup> In Greek, Σχοινικλος, Σχοινικος, Σχοινιω, (from Σχοινος, a rush); Σζωθος Σχοινικλος, (Rush Sparrow); Bake (perhaps from Baloc, a thorn); in German, Rhor-Spar, Rhor-Sperling, or Rhor-Spatz, (i. e. Reed Sparrow); Weiden-Spatz (Willow Sparrow); in Swedish, Saefsparf; in Polish, Wrobel Trzeinnis.

## -254 THE REED BUNTING.

The Reed Ortolans delight in fens, and nestle among the rushes; however, they fometimes refort to the high grounds in rainy seasons. fpring they are seen by the sides of the roads, and in August they feed in the corn fields. Kramer tells us that they are fondest of millet. general they feek their food like the Buntings, along the hedges, and in the cultivated spots. They keep near the ground, and feldom perch except on the bushes. They never affemble in flocks, and scarcely more than three or four are feen at once. They arrive in Lorraine about the month of April, and depart in autumn; however, there are always some of them which continue in that province during the winter.—They are found in Sweden, Germany, England, France, and sometimes in Italy, &c.

This little bird is almost perpetually on the watch, to discover its foe, and when it deferies some sowlers, it makes an incessant cry, which is not only teazing, but sometimes scares away the game. I have seen sportsmen quite out of patience at the notes of this bird, which are somewhat like those of the Sparrow. The Reed Bunting has besides a pleasant warble in the time of hatching, about the month of May.

This bird jerks its tail upwards and down-wards as quick as the Wagtails, and with more animation.

In.

In the male, the upper-part of the head is black; the throat and the fore-part of the neck variegated with black and rufty gray; a white collar on the upper-part of the neck only; a fort of eye-brow and a bar of the same colour under the eyes; the upper-part of the body variegated with rufous and black; the rump and the superior coverts of the tail variegated with gray and rusty; the under-part of the body. white, shaded with rusty; the sides slightly spotted with blackish; the quills of the wings brown, edged with different shades of rufous; the quills of the tail the same, except the two outermost on each fide, which are edged with white; the bill is brown, and the legs are of a. dark flesh-colour.

The female has no collar; its throat is not fo black, and its head is variegated with black and light rufous: the white which occurs in its plumage is not pure, but always sullied with a rufous cast.

Length, from five inches three-fourths to five inches; the bill four lines and a half; the leg nine lines; the middle toe eight lines; the alar extent nine inches; the tail two inches and a half, confishing of twelve quills, and projecting about fifteen lines beyond the wings. [A]

<sup>[</sup>A] Specific character of the Reed Bunting, Emberica Schæniclus:—" Its head is black, its body gray and black, the outer-" most quills of its tail marked with a wedge-shaped white spot." It is five inches and three-fourths long. It is found as high as Denmark,

Denmark; it is frequent in the fouthern parts of Russia; and it visits Britain in the summer. It suspends its nest between four reeds, a sew seet above the water; this nest is made of grass-stalks, lined with the down of reeds. The bird lays sour or sive eggs of a bluish white, variegated with purple streaks. It sings, especially at night.

M

#### The HOODED BUNTING\*.

Coqueluche, Buff.

A fort of hood of a fine black covers the head, throat, and neck, and then, tapering to a point, descends on the breast, nearly in the same manner as in the Reed Ortolan; and this black is never interrupted, except by a small white spot on each fide, very near the opening of the bill; the rest of the under-part of the body is whitish, but the fides are speckled with black. The hood which I have mentioned is edged with white behind; all the rest of the upper-part of the body variegated with rufous, and blackish; the quills of the tail are blackish, but the two intermediate ones are edged with rufty; the two outermost have a large oblique spot; the three others are uniform throughout.

Total length five inches; the bill fix lines, entirely black, the tarfus nine lines; the tail two inches, rather forked, and projects about thirteen lines beyond the wings.

\* This bird is in the cabinet of Dr. Mauduit, who has called it the Siberian Reed Ortolan. I have not ventured to adopt this appellation, lest the subject should be found to be only a variety of our Reed Ortolan.

M

The

# The MUSTACHOE BUNTING,

Le Gavoué de Provence, Buff. Emberiza Provincialis, Gmc1.

This bird is distinguished by a black spot at the ears, and a line of the same colour which extends on each side of the bill like mustachoes. The lower-part of the body is cinereous; the upper-part of the head and of the body, variegated with rusous and blackish; the quills of the tail are divided by the same colours, the rusous being exterior and apparent, and the blackish being within and concealed. There is also a little whitish round the eyes, and on the great coverts of the wings.

This bird feeds on grain; it is fond of perching; and in the month of April its fong is pleasant.

This is a new species introduced by M. Guys.

Total length four inches and three-fourths;
-the bill five lines; the tail twenty lines, fomewhat forked, and stretching thirteen lines beyond the wings. [A]

[A] Specific character of the Emberiza Provincialis:—" It is variegated with gray and black; the under-fide of the body and a spot on its wings, white; a spot under the eye, and stripe on the jaw, black."

M

## The LESBIAN BUNTING.

Le Mitilene de Provence, Buff. Emeriza Lespia, Gmel.

This bird differs in feveral respects from the preceding: the black which appears on the fides of the head is disposed in three narrow stripes, -parted by white spaces; the rump and the superior coverts of the tail are shaded with several rufous tints. But the difference of habits affords a more marked distinction; the Lesbian Bunting does not begin its fong before the month of June; it is more rare and shyer, and its repeated cries warn the other birds of the approach of the Kite, of the Buzzard, or of the Hawk; in which circumstance it refembles the Reed Bunt-The present inhabitants of Mytilene, or ancient Lesbos, employ it, on this account, as a fentinel for their poultry, but take the precaution to shut it in a strong cage, lest itself become the prey of the ferocious invader. [A]

[A] Specific character of the Emberiza Lesbia: - It is varie-" gated with gray and black; its under-furface and its orbits white; has three Bripes of black and white under its eyes;.

" its lateral tail-quills partly white."

M.

#### The LORRAINE BUNTING.

L'Ortolan de Lorraine, Buff. . Emberiza Lotharingica, Gmel.

Lottinger fent us this bird from Lorraine, where it is very common.—Its throat, the forepart of its neck, and its breast, are of a light ash-colour, speckled with black: the rest of the under-part of its head and body rufous, speckled with black; the space round the eyes of a lighter-- colour; there is a black streak below the eyes: the small coverts of the wings are of light cinereous without speckles; the others parted by rufous and black; the first quills of the wings black, edged with light cinereous, the following with rufous; the two middle quills of the tail rufous, edged with gray, the others partly black and partly white, but the outermost have always a greater share of white; the bill is rufous-brown, and the legs of a lighter shade.

Total length fix inches and a half; the bill five lines and a half; the tail two inches and four lines, and exceeds the wings by fifteen lines.

The female has a fort of collar mottled with rufous and white; all the rest of the under-part of the body is rufty-white; the upper-part of the head is variegated with black, with rufous, and with white, but the black disappears behind the head, and the rufous grows more dilute, fo

that

that an almost uniform rusty-gray is produced. It has white eye-brows; the cheeks are deep rufous; the bill orange-yellow at its base, and black at its point; the edges of the lower mandible are adapted into the upper; the tongue is forked, and the legs are black.

One of these birds was brought to me the 10th of January; it had been just killed on a stone in the middle of the high-road; it weighed an ounce; its intestines measured ten inches; it had two very small cæca; the gizzard was very thick, about an inch long, and seven lines and a half broad, and silled with vegetable substances, and many small pebbles; the cartilaginous membrane in which it was sheathed, had more adhesion than is usual in birds.

Total length five inches ten lines; the bill five lines and a half; the alar extent twelve inches; the tail two inches and a half, somewhat forked, and projecting about an inch beyond the wings; the hind nail four lines and a half longer than the toe.

M

# The LOUISIANE BUNTING.

L'Ortolan de la Louisiane, Buff. Emberiza Ludovicia, Linn. Gmel. Hortulanus Ludovicianus, Briss.

This American bird has the fame mottling of whitish and black on its head that is common to almost all our Ortolans; but its tail, instead of being forked, is on the contrary fomewhat tapered. The top of the head is marked with a black horse-shoe, which opens beside the bill, and its branches extending above the eyes, coalesce at the back of the head: there are some other irregular spots below the eyes; rufous predominates on all the lower-part of the body. being deeper on the breast and lighter above and below it; the upper-part of the body is variegated with rufous and black, and so are the great ' and middle coverts and the quills of the wings next the body; but all the other quills and the fmall coverts of the wings are black, as well as the rump, the tail, and its superior coverts; the bill has blackish spots on a rusous ground; the legs are cinereous.

Total length five inches and one-fourth; the bill five lines; the tail two inches and one-fourth, confisting of twelve quills, somewhat taper, and projects fourteen lines beyond the wings. [A]

M.

<sup>[</sup>A] Specific character of the Emberiza Ludoviciana:—" It is rufous spotted with black, below pale, the breast rufous, the head marked with a black arch."

## .The YELLOW-BELLIED CAPE BUNTING.

L'Ortolan à Ventre Jaune du Cape de Bonne-Esperance, Bust. Emberiza Capensis, var. B. Linn,

.We received this from Sonnerat. It is the most beautiful of the genus; its head is of a gloffy black, with five white rays nearly parallel, the middle extending to the lower-part of the neck; all the upper-part of the body is yellow, but deepest on the breast, from which it fpreads upwards and downwards, growing more dilute by imperceptible degrees, fo that the origin of the neck, and the last of the inferior coverts of the tail, are almost white; a gray transverse bar separates the neck from the back, which is brown-rufous, variegated with a lighter colour; the rump is gray'; the tail brown, edged with white on both fides, and delicately tipt with the fame; the small coverts of the wings ash-gray; the uncovered part of the middle ones white; the great ones brown, edged with rufous; the quills of the wings blackish, edged with white, except those next the body, which are edged with rufous; the third and fourth are the longest of all. With respect to the quills of the tail, the outermost, and the one next it on each side, are shorter than the rest; so that were the tail equally divided, though the whole be fornewhat forked, each of the parts is taper; the greatest difference between the length of the quills is three lines.

In the female the colours are less vivid and distinct.

Total length six inches and one fourth; the bill six lines; the tail two inches and threefourths, consisting of twelve quills, and exceeding the wings sisteen lines; the tarsus eight or nine lines; the hind nail is the strongest of all.

M

## The CAPE BUNTING.

L'Ortolan du Cap de Bonne Esperance, Buff. Emberiza Capensis, Linn. and Gmel. Hortulanus Gapitis Bonæ Spei, Briff.

This bird is as remarkable for dusky ill-defined colours, as the preceding is conspicuous for the richness and lustre of plumage: it has, however, two black streaks, the one above, and the other below the eyes, which characterize the genus. The upper-part of its head and neck is variegated with dirty gray, and blackish; the upper-part of the body black, and yellowish-rusous; the throat, the breast, and all the under-part of the body, dirty gray; the superior coverts of the wings rusous; the great coverts, and the quills of the wings, and the quills of the tail, blackish, edged with rusty; the bill and legs blackish.

Total length five inches and three-fourths; the bill five lines; the alar extent near nine inches; the tail two inches and a half, confishing of twelve quills, and exceeds the wings by fifteen lines. [A]

<sup>[</sup>A] Specific character of the Emberiza Capensis:—" It is gray, its throat whitish, a stripe on its eyes, and cheeks blackith."

# The SNOW BUNTING\*.

L'Oriolan de Neige, Buff.
Emberiza Nivalis, Linn. Gmel. Scop: Mull. Frisch, &c.,
Emberiza Varia, Klein.
Hortulanus Nivalis, Briff.
Avis Nivis, Mart. Spitz.
See-Lerche, Wirs.
Piul Mountain Finch, Alb.
Sea-Lark, Ray.

Alps, the shores of Hudson's-bay, and perhaps countries still more northerly, are, during the summer months, the favourite abodes of this bird. The excessive severity of these inhospitable climates changes part of its plumage into white in winter †. It has some variety of appearance from the diversissed intermixture of white, black, or rusty; and the combinations of these colours are affected by the season, and by the temperature of the air.

In Polish, Sniegula, Sniezniczka; in Danish, Sneekok, Winter-fugel; in Swedish, Snoesparf; in Norwegian, Snee-fugl, Fiælster, Snee-spurre, Snee-titing, Sælskriger; in Icelandic, Sino-tytlingur, Soelskrikia, Tytlings-blike; in Laplandic, Alpe, Alaipg; in Dalecarlien, Illwars-vogel; in Scanian, Sioè-laarka; in Greenlandish, Kop-ano-arsuch.

† Those white feathers are black at the base; and sometimes the black shines through the white, and forms a multitude of little spots, as in the individual painted by Frisch, under the name of The Spotted White Bunting. At other times the black collar of the base of each feather extends on a great part of the wing; so that a blackish colour is thus produced over all the under-side of the body, as in the Blackish and Yellowish Finch of Aldrovandus. Lib. XVIII. pp. 817, 818.

In winter the head, the neck, the coverts of the wings, and all the under-part of the body, are in the male white as fnow, with a light and almost transparent tint of rusty on the head only; the back black; the quills of the wings, and of the tail, partly black, partly white. fummer the head, the neck, the under-part of the body, and even the back, are stained with transverse rusty waves of various intensity, but never so deep as in the female, of which it is the predominant colour, and disposed in longitudinal stripes. In some subjects the neck is cinereous, the back cinereous variegated with brown; a purple tinge round the eyes; a reddish cast on! the head \*. &c. The colour of the bill is also variable; fometimes yellow, fometimes cinereous at the base, and generally black at the point. In all, the nostrils are round, somewhat prominent, and covered with small feathers; the tongue is a little forked; the eyes are small and black; the legs black, or blackish.

These birds leave their mountains when the snows and frosts will not permit them to procure their food. This is the same with that of the white grous, and consists of the seeds of a species of birch †, and of other seeds. When kept in the cage they are very well reconciled to oats, and pluck the heads very expertly.

<sup>\*</sup> Schwenckfeld.

<sup>+</sup> The Betula Nana, or Dwarf Birch; a native of the arclic regions.

with green-pease, hemp-seed, miller, the seeds of dodder\*; but hemp-seed fattens them too fast, and occasions their death.

They return in spring to their icy summits. Though they do not always hold the same route, they are commonly seen in Sweden, in Saxony, in Lower Silesia, in Poland, in Red Russia, in Podolia, and in Yorkshire †. They are very rare in the south of Germany, and almost entirely unknown in Switzerland and Italy ‡.

In the time of their passage they keep conflantly along the roads, picking up small feeds, and every fort of food. This is the proper seafon-for catching them. They are prized on account of the fingularity of their plumage, and the delicacy of their flesh, and not for the sake of their fong, which confifts in an unmeaning cluck, or in a shrill cry resembling that of the Jay, which they utter when handled: but to judge fairly of their warble, we ought to hear them in the season of love, when the warmth of passion inspires, and softens the native strains. We are ignorant also of the particulars of their breeding: it is undoubtedly in the countries where they spend the summer, but there are not many observers in the Lapland Alps.

<sup>\*</sup> Cuscuta Europæa. Linn.

<sup>†</sup> Willughby killed one in Lincolnshire. Ray says that numbers of them are caught during winter in Yorkshire. Johnson informed Willughby that some are seen on the chain of the Northumbrian mountains.

I Gefner and Aldrovandus.

These birds do not perch; they continue always on the ground, where they run and trip about like our Larks, to which they are similar also in their port, in their size, in their long spurs, &c. but differ in the shape of the bill and tongue, in their plumage, in their migrations, in their arctic abodes, &c. \*

It is observed that they sleep little or none in the night, and begin to hop by the earliest dawn. Perhaps this is the reason why they prefer the lofty mountains of the north in summer, where the day lasts the whole season.

Total length six inches and a half; the bill five lines; on the palate is a small tubercle that distinguishes the genus; the hind-toe is equal to that of the middle, and the nail is much longer, and less hooked; the alar extent eleven inches and one fourth; the tail two inches and two-thirds, somewhat forked, consisting of twelve quills, and projecting ten lines beyond the wings. [A]

\* Some able naturalists have ranged the Snow Ortolan with the Larks; but Linnaus has with great propriety referred it to the Buntings.

[A]. Specific character of the Snow Bunting, Emberiza Nivalis:
—"Its wing-quills are white, the primaries black without; the
"tail-quills black, the three lateral white." These birds are of
the size of the Chassinch. They probably breed in Spitzbergen,
and certainly in Greenland, where they make their nests in the
sistures of the mountain rocks, employing grass for the outside,
seathers for the inside, and the down of the arctic fox for lining.
They lay sive white eggs, spotted with brown. They sing sweetly,
sitting on the ground.

· .

In autumn the Snow Buntings issue from their frozen retreats, and visit the northern parts of Europe. They appear in Sweden in severe weather, and are thence called Ill-vars-wogel, and Hard-wars-fogel; and many are caught near the sea-shores. They enter Britain by the north of Scotland; at first they are lean, but soon grow fat and delicious; the Highlands abound with them.

The Snow Buntings appear also at Hudson's-bay in April, retire northward in May to breed, and pay another visit in September. They live in vast slocks, feed on grass-seeds, &c. and are easily caught.

Their colour being produced by the degree of cold to which they are exposed, is necessarily variable.

#### VARIETIES of the SNOW BUNTING.

It will be readily perceived from what we have faid in regard to the winter and summer dress of these birds, that we are not here to consider the Varieties which belong to the two principal epochs, or the intermediate terms; these being only the shades which mark the progressive influence of cold or heat.

- I. The JACOBINE BUNTING\*. It is a variety of climate. Its bill, breast, and belly, are white; the legs gray, and all the rest black. It appears every winter in Carolina and Virginia, and retires in the summer to breed probably in the north.
- \* This is the Black Bunting of Pennant and Latham, and the Snow Bird of Catelby and Kalm; it is the Emberiza Hyemalis in the Linnman fystem, and the Hortulanus Niwalis Niger of Brisson-Specific character:—" It is black, its belly white." These birds breed in the northern parts of America, winter in the state of New York, and in very severe scasons visit Virginia and the Carolinas in immense bodies. They frequent the gardens and hillocks, to pick up the scattered grass-seeds. The Americans call them Chuck-birds, and esteem them delicious eating.

II. The

.II. The COLLARED SNOW BUNTING \*. The head, throat, and neck, are white. two forts of collars at the under-part of the neck; the upper lead-colour, the lower blue; both feparated by the ground colour, which forms a fort of white intermediate collar; the quills of the wings are white, tinctured with a greenish yellow, and strewed with some black feathers; the eight quills of the middle of the tail, and the two outer ones, white; the two others black; all the rest of the plumage reddish brown, spotted with \*greenish yellow; the bill red, edged with cinereous; the iris white, and the legs flesh-coloured.—This bird was caught in the county of Effex; it could not be enfoared till after many and tedious trials.

Kramer observes that in the Ortolans, as well as in the Yellow Buntings, the Chassinches, and Bulfinches, the two mandibles are moveable; and this is the reason, he says, why they shell the seeds, and do not swallow them entire.

<sup>\*</sup> This is the Pied Chassinch of Albin and Latham, the fourth variety of Linnaus's Snow Bunting, the Fringilla Capite Albo of Klein, and the Hortulanus Nivalis Torquatus of Brisson.

# The RICE BUNTING.

L'Agripenne, ou L'Ortolan de Riz, Buff. Emberiza Oryzivora, Linn. and Gmel. Hortulanus Carolinensis, Briss. Emberiza Carolinensis, Klein. The Rice Bird, Catesby.

THESE birds are migratory birds, and the motive of their passage is not known. Numerous flocks of them are feen or rather heard in the month of September, coming from. the Island of Cuba, where the rice has already attained maturity, and directing their course to Carolina, where it is only coming into ear. These remain in Carolina only three weeks, and then advance towards the north, always in fearch of more tender grain: and, by successive stations, they penetrate as far as Canada, and perhaps beyond. But what is the most fingular, though there are other fimilar instances, these slocks are composed entirely of females. It is ascertained, we are told, from numerous diffections, that only the females pass in September; but in the beginning of the spring, the males and females are intermingled; and indeed, this is the season of the union of the fexes.

The plumage of the females is rusty over almost its whole body; that of the males is more diversified:

# THE RICE BUNTING

diverlified; the fore-part of the head and neck," the throat, the breast, and all the under-part ofthe body, the upper-part of the back and the thighs, black, with a mixture of rufly; the back of the head and neck rufty; the lower-part of the back and rump of an olive cinereous; the great superior coverts of the wings of the same -colour, edged with whitish; the finall superior coverts of the wings, and the superior coverts of the tail, dirty white; the quills of the wing black, tipt with brown, and edged, the great ones with fulphur-colour, and the small ones with gray; the quills of the tail are nearly like the great quills of the wings, only all terminate in points \*; lastly, the bill is cinereous, and the legs brown. This Ortolan is remarked to be . taller than the rest.

Total length fix inches and three-fourths; the bill fix lines and a half; the alar extent four inches; the tail two inches and a half, fomewhat forked, and exceeding the wings by ten lines. [A]

For this reason we have called the bird Agripenne.

<sup>[</sup>A] Specific character of the Rice Bunting, Emberiza Oryzivora:—"Black, the neck tawny, the belly black, the tail-quills "pointed." It is remarkable that the Rice birds were not known in Carolina before the end of last century, when that nutritious grain was introduced from Madagascar. We may suppose that a few stray birds had been driven into that province by adverse winds, and had fared so well among the rice-crops, as to have returned with their brood the ensuing season: and thus, in the course of a few years, a direction would be given to their general migrations. They arrive in Carolina about September; at first they

are very lean, but soon grow excessively fat, and sly with difficulty, so that they are easily shot. Their stay lasts three weeks; and both sexes make a transient visit in the spring. A sew remain through the winter in Carolina, and even in Virginia, where they subsist on the scattered grains of Indian corn.

# - VARIETIES of the RICE BUNTING.

### The LOUISIANA BUNTING.

L'Agrippenne, ou Ortolan de la Louisiane, Buff. Emberiza Oryzivora, Var. Linn.

I consider this as a variety of the preceding. produced by the influence of climate: its fize, its port, its shape are the same, and the quills of the tail are likewise pointed, the only difference, in short, consisting of the colours of the plumage. The Louisiana Bunting has the throat and all the under-part of the body of a light yellow, which is still more dilute on the lower-belly; the upper-part of the head and of the body, and the small superior coverts of the wings, are of an olive-brown; the rump and the fuperior coverts of the tail, yellow, finely striped with brown: the quills of the tail blackish, those of the middle edged with yellow, the lateral ... ones with white, the intermediate ones with the different shades that intervene between white and yellow; the great superior coverts of the wings

# VARIETIES OF THE RICE BUNTING. 273

are black, edged with white; the quills are the fame, except the middle ones, which have more white.

The measures are nearly the same as in the Rice Bunting \*.

\* Mr. Pennant thinks that this bird is the female of the common Rice Bunting.

## The YELLOW BUNTING!

Le Bruant de France, Bust.
Enberiza Cierinella, Linn. Gmel. Scop. Will. Kram. &c.:
Emberiza Flava, Gesner.
Emberiza, Briss.
The Yellow Youlring, Sibbaldi Scotia Illustrata.
The Yellow Hammer, Ray.

THE offeous tubercle or barley-corn on the palate of this bird, proves indisputably its affinity to the Ortolans: but it resembles them also by other properties; by the shape of its bill and tail, by its proportions, and by the delicacy of its sless †. Salerne remarks, that its cry is nearly the same.

The Yellow Bunting makes feveral hatches, the last in September: it places its nest on the

• In Germany, it is called Emmerling, Geel-ammer, Gerst-ammer, Gruen-zling, Gaelgensicken, Gilbling, Gilberschen, Gilwertsch, Kornwogel, Geel-gorst; which names allude in general to its yellow plumage and its feeding upon corn, especially barley; in Switzerland, Emmeritz, Embritz, Emmering, Hemmerling; in Italy, Zivolo, Zigolo, Cia Megliarina, Vetzero, Paietzero, Spaiarda; in Brabant, Jasine; in Illyria, Struad; in Sweden, Groening; in Denmark, Gulspury, Gulvessing; in Smoland, Golspinck. In Latin, it was termed Galgulus, or Galbula, and also Isterus, from the Greek Islipos, signifying the jaundice, both on account of its yellow plumage, and a notion entertained by the people that the sight of it cured that disease. Plin. xxx. 11.

† Its sless is yellow, and has been said to be a remedy for the jaundice: nay, a person afflicted by that disease might transfer it by looking at the bird. SCHWENCKFELD.

ground,



THE YELLOW HAMMER.

reground, helow a clod, in a bush, or in a tuft of grass, but always carelessly. Sometimes it builds in the low branches of shrubs, and is then at more pains. The body of the nest consists of, straws, moss, and dry leaves, and is lined with roots, the finest straws, hair, and wool. The eggs are generally four or five, spotted with brown of different shade, on a white ground; but the spots are thicker at the large end. female covers with such ardent attachment, that often she can be caught by the hand in broad day. The young are fed with small feeds, infects, and even May-flies; but of these last, the hard crust sheathing the wings is previously separated by the parents. They are however granivorous, and fondest of millet and hempfeed. They can be caught by a noofe baited with a head of oats; but cannot be decoyed, it is faid, by the call. In fummer they haunt the trees, the fides of the hedges and bushes; sometimes they visit the vineyards, but scarcely ever penetrate into the heart of the forests. In winter, a part of them migrate into other climates. and those which remain behind assemble and join the Chaffinches, Sparrows, &c. forming very numerous flocks, especially in rainy weather. They refort to the farms, and even to the villages and high roads, picking up their subsistence among the bushes, and even in horse-dung, &c. and in that season they are almost as familiar

The Yellow Buntings are spread over the whole of Europe, from Sweden to Italy, and through all the interjacent countries; and they are consequently exposed to great difference of temperature, which happens to most birds in any degree domestic.

The male is distinguished by the bright yellow feathers on the head and on the lower-part of the body; but on the head this colour is variegated with brown; it is pure yellow on the sides of the head, under the throat, under the belly, and on the inferior coverts of the

<sup>\*</sup> Frisch derives the German name Ammer, or Hammer, from Dam, which signifies a house: Ammer, on this hypothesis, would denote domestic. [The old English name Yellow Hammer is evidently borrowed from the German.]

<sup>†</sup> According to some, they have another cry, vignerot, vignerot, vignerot, titchye. Olina says, that they partly imitate the warble of the Chassinches, with which they associate. Frisch relates that they adopt something of the song of the Canary when they hear it young: he adds, that the cross breed of the cock Bunting and hen Canary chants better than the sather. Lastly, Guys says, that the song of the cock Bunting grows pleasant on the approach of the month of August. Aldrovandus also speaks of its sine warble.

wings, and it is mixed with light chefnut on all the rest of the lower part; the neck and the fmall fuperior coverts of the wings are olive; the middle and large coverts of the wings, the back, and even the four first quills of the wings are blackish; the rest are brown, and edged, the two outer with white, and the ten others with whitish gray; lastly, their superior coverts are light chesnut, terminated with whitish gray! The female has not fo much yellow as the male, and is more spotted on the neck, the breast, and 'the belly: in both, the edges of the lower mandible are received into the upper, whose edges are scalloped near the point; the tongue is divided at the tip into slender threads; and lastly, the hind claw is the longest of all. , The bird weighs five or fix gros; the intestinal tube is feven inches and a half long; vestiges of a cæcum; the æsophagus is two inches and a half long, dilating near the gizzard, which is muscular; the gall bladder very small. I found in the ovarium of the females which I diffected, eggs of unequal bulk.

Total length, fix inches and one third; the bill five lines; the legs eight or nine lines, the middle toe almost as long; the alar extent nine inches and one-fourth; the tail two inches and three-fourths, consisting of twelve quills, somewhat forked, not only because the intermediate quills are shorter than the lateral ones, but also because the six quills on each side turn naturally

# 278 THE YELLOW BUNTING.

outwards; they extend twenty-one lines beyond the wings. [A]

[A] Specific character of the Yellow Bunting, Emberiza-Citrinella:— Its tail-quills are blackish, the two outermost marked with a sharp white spot on the inside. Thus described by Brisson: Above variegated with tawny-blackish and white-gray; below yellowish; the breast variegated with dilute chesnut, yellowish, and olive; the head yellowish, varied with dusky spots; a dusky bar behind the eyes; the two outmost tail-quills on both sides marked within with a white spot. It is six inches and a half long; very frequent in England. It lays six eggs, which are whitish-purple, with blackish irregular spots and streaks.

# VARIETIES of the YELLOW BUNTING.

The colours vary, in different subjects and in different climates, both their shades and distribution: sometimes the yellow extends over all the head, neck, &c. In some, the head is of a yellowish cinereous; in others the neck is cinereous, spotted with black; the belly, the thighs, and the legs are saffron-colour; the tail brown, edged with yellow, &c.

# The CIRL BUNTING.

Le Zizi, on Bruant de Haie \*, Buff. Emberiza Cirlus, Linn. and Gmel. Emberiza Sepiaria, Briff. Cirlus, Aldrov. The Cirlus, or Zivolo, Will.

THIS is seen sometimes perched, sometimes . - running on the ground, and particularly in newly ploughed fields, where it finds feeds, Amall worms, and other infects; and accordingly it almost always has earth sticking to its bill-It is eafily enshared, and when caught with birdlime, it oftenest remains attached, or if it entangles itself, it loses most of its feathers in the Rruggle, and is no longer able to fly. It foon becomes reconciled to captivity, but is not absolutely insensible of its situation; for, during the first two or three months, it has only its usual chirp, which it repeats with frequency and trepidation when a person goes near its cage: however, by gentle treatment, it at length refumes its warble. Its fize and its habits are nearly the same with those of the Yellow Bunting, and probably, if we were better acquainted with these birds, we should perceive that they belonged to the same species.

. i. e. The Hedge-Bunting.

The Cirl Buntings are not found in the northern countries, and seem to be most frequent in those of the south; however, they are rare. in feveral provinces of France. - They are often feen with the Chaffinches, whose fong they imitate, and with whom they form numerous flocks, especially in rainy days. They feed on the same fubstances as the other granivorous tribe, and live about fix years according to Olina: but this must be understood of them in the domestic state; for it is uncertain what effects fresh air and freedom of motion may have upon · longevity. In the male, the upper-part of the head is spotted with blackish upon an olive-green ground; there is a yellow spot on the sides, divided into two unequal parts, by a black streak which passes over the eyes; the throat is brown. and also the top of the breast, and a yellow collar lies between them; the rest of the underpart of the body is yellow, which grows more dilute as it spreads to the tail, and is spotted with brown on the flanks; the upper-part of the neck and back is variegated with rufous and blackish; the rump olive-rusous, and the superior coverts are of a purer rufous; the quills of the wings brown, edged with olive, except the nearest to the back, which are rufous, and the two middle ones, which are rufty-gray; laftly, the bill is cinereous, and the legs brown.

In the female, there is less of the yellow, the throat is not brown, nor does any brown spot appear on the breast.

Aldrovandus tells us, that the plumage is subject to much diversity in this species: the one which he sigured had a dull green tinge on its breast; and of those which I have observed, I found one of which the upper-part of the neck was olive, with scarcely any admixture.

Total length fix inches and one-fourth; the bill about fix lines; the alar extent nine inches and three-fourths; the tail near three inches, composed of twelve quills, and projecting about ten lines beyond the wings, and forked as in the Yellow Bunting. [A]

[A] Specific character of the Cirl-Bunting, Emberiza-Cirlus:—

"It is brown, its breast spotted, its eye-brow yellow, the two

contermost quills of its tail marked with a white wedge-shape...

"spot."

M.

# The FOOLISH BUNTING.

Le Bruant Fou, Buff.

Emberiza-Cia, Linn. Gmel. Kram.

Emberiza Pratensis, Briss. and Gesner.

Emberiza Barbata, Scop.

Cirlus Stultus, Ray, and Will.

Foolish to this bird, on account of its incautious disposition, being readily caught in every sort of snare: but the want of circumfpection is characteristic of the genus, and the Foolish Bunting is inconsiderate only in a higher degree. The name of Meadow Bunting is improper; for the most observant bird-catchers and fowlers have unanimously assured me, that they never saw it in the meadows.

Like the Cirl Bunting, the Foolish Bunting is not found in the northern countries; nor does its name occur in the catalogues of the Swedish and Danish birds. It prefers solitude, and delights in mountainous abodes. It is very common and well known in the hills round Nantua. Hebert \* often saw it on the ground, and upon the chesnut-trees; and the country people told him, that its sless was excellent meat. Its. song is very ordinary, and resembles that of the Yellow Bunting; and the Prussian bird-catchers

This excellent observer has communicated or confirmed the principal facts of the history of the Buntings.

have

have remarked, that when it is put into a volery among others of a different species, it discovers a strong predilection for the Yellow Bunting. Indeed its cry\*, its size, its sigure, are the same, and it differs only by some of its habits.

In the male, all the upper-part is variegated with blackish, and gray; but this gray is purer on the head, and rusty every-where else, except on some of the middle coverts of the wings, where it becomes almost white. The same rusty gray edges almost all the quills of the wings and of the tail, whose ground colour is brown, only the two exterior quills of the tail are edged and tipt with white; the orbits are rusty white; the fides of the head and of the neck are gray; the throat is gray, dotted with blackish, and edged on each fide and below by a line almost black, which forms an irregular fort of square with the gray plate on the fides of the head; all the under-part of the body is fulvous, more or less dilute, but dotted or variegated with blackish on the throat, the breaft, and the flanks; the bill and legs are gray.

Total length fix inches and one fourth; the bill five or fix lines; the alar extent nine or ten inches; the tail two inches and one third, a little forked, confifting of twelve quills, and exceeding the wings by fixteen lines. [A]

<sup>•</sup> Linnzus fays that in flying it chirps zip, zip.

<sup>[</sup>A] Specific character of the Foolish Bunting, Emberiza-Cia:

"It is rusty, its head marked with scattered blackish lines, its eyebrows white."

# The COMMON BUNTING

Le Proyer, Buff.

Emberiza Miliaria, Linn. Gmel. Kram. and Frisch.

Emberiza Alba, Will., and Klein.

Cynchramus, Briss.

in the spring. It deserves to be called Meadow Bunting, since in the summer season it never strays far from the low grounds †. It makes its nest among the fields of barley, of oats, of millet, &c. seldom on the surface of the ground, but three or sour inches above, among the thick strong herbage ‡. The semale lays four, five, and sometimes six eggs; and while she is engaged in hatching, the male brings her tood, and sitting on the summit of a tree, he repeats incessantly the disagreeable cry, tri, tri, tri, triitz, which he retains only till the month of August: the notes are sharper and shorter than those of the Yellow Bunting.

It has been observed, that when the Bunting rose from the ground towards a branch, its legs dropped, and its wings quivered with an irre-

<sup>-</sup> In German, Knust, Knipper, Gerst-Ammer (Barley-Bunting), Graue-Ammer (Gray Bunting); in Swedish, Korn-laerka (Corn-Lark); in Norwegian, Knotter. The Italian name Strilozzo comes from Strillare, to creek, on account of its cry. In Greek it was called Κυγχραμος, or Κυχρανος, according to Belon.

f Belon says that it follows the water like the Woodcock.

<sup>3</sup> Belone



THE BUNTING.

gular motion peculiar to the feason of love. At other times, in autumn for instance, it slies equably and swiftly, and mounts to a considerable height.

The young ones leave the nest long before they are able to fly, and take delight to run among the grass; and this would seem to be the reason why the parents build so close to the ground. The pointer-dogs often surprise them in the chace of quails. The parents still continue to feed and guard them till they are sleaged; but their anxiety for the safety of their brood often betrays them, and if a person chances to go near the spot, they circle his head with a doleful air.

After the family is raised, they pour their numerous slocks into the fields, especially among the crops of oats, beans, and the late sorts of; grain. They migrate soon after the Swallows, and it very seldom happens that any of them remain during the winter\*.

It is observed that the Bunting does not flutter from branch to branch, but alights on the extremity of the highest and most detached bough either of a tree or shrub, and in a moment begins its song, which it prolongs for whole hours in the same place, repeating its tiresome note, tri, tri; and lastly, that in taking slight, it chatters with its bill †.

<sup>\*</sup> Gesner.

<sup>+</sup> Most of these facts were communicated by M. Hebert.

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The female fings also, after the young no longer occupy her attention; but this is only when perched on a branch, and about mid-day. Her song is as bad as that of the male. She is rather smaller, but her plumage is nearly the same. Both feed upon grain and small insects, which they find in the fields and meadows.

These birds are spread over all Europe, or rather they visit the whole extent of it in their migrations. Olina affirms that they are more numerous at Rome and in its vicinity than in other countries. Bird-catchers keep them in a cage to use as calls in autumn; and they not only entice the Foolish Buntings into the snare, but many other small birds of different kinds. They are for this purpose put in low cages without any bars or roofts.

In the male, the upper-part of the head and body is variegated with brown and rufous; the throat, and the orbits, light rufous; the breaft, and all the rest of the under-part of the body, yellowish-white, spotted with brown on the breast and sides; the superior coverts of the wings, their quills, and those of the tail, are brown, edged with rufous, more or less dilute; the bill and legs brown gray.

In the female, the rump is gray, verging upon rufous, without any spots; the superior coverts of the tail the same colour, edged with whitish; and in general the quills of the tail, and of the wings, are bordered with lighter colours.

The

The bill of these birds is of a remarkable shape; the two mandibles are moveable, as in the Ortolans; the edges are also re-entering, as in the Common Bunting, and the junction is made in a crooked line; the edge of the lower mandible on each side, near the third of its length, makes an obtuse salient angle, and is received by the corresponding re-entrant angle in the upper-mandible, which is more solid and bulky than in most other birds; the tongue is narrow, thick, and tapered to a point, like a tooth-pick; the nostrils are covered above by a membrane of a crescent shape, and below by small feathers; the first phalanx of the outer toe is joined, to that of the middle toe.

Intestinal tube thirteen inches and a half; the gizzard muscular, preceded by a moderate dilatation of the asophagus, containing vegetable matter, and nuts with small pebbles; slight vestiges of a cacum; no gall-bladder; the great axis of the testicles four lines, the smaller one three lines. Total length of the bird seven inches and a half; the bill seven lines; the alar extent eleven inches and one third; the tail nearly three inches, somewhat forked, consisting of twelve quills, and stretching eighteen lines beyond the wings. [A]

<sup>[</sup>A] Specific character of the Common Bunting, Emberiza Miliaria:—"It is brown, below spotted with black, its orbits rusous."

# FOREIGN BIRDS, WHICH ARE RELATED TO THE BUNTINGS.

I.

# The BRAZILIAN BUNTING.

Le Guirnegat, Buff.
Emberiza Brafiliensis, Gmel. and Briff.

America, and its cry been different from that of the Yellow Bunting\*, I should have considered it as a mere variety. Indeed its plumage has even more of the Yellow than common in ours †, and I have no doubt but they, would intermix, and beget prolific offspring.

The yellow is spread unmixed on the head, the neck, and all the under-part of the body, and also borders almost all the superior coverts, and the quills of the tail and of the wings, which are brown; on the back it is intermingled with brown and green; the bill and the eyes are black, and the legs brown;

† Some individuals of our Bunting have the head, the neck, and the upper-fide of the body almost entirely yellow; but this is rare.

This

<sup>\*</sup> Our Bunting is called Luteola, Aureola, Gold hammer, Bruant Jame, Bruant Doré, Cia Pagliarina: so that yellow would feem to form part of its essence.

This bird is found in Brazil, and probably is indigenous, for the natives have given it a name, Guiranheemgata. Marcgrave praises its song, and compares it to that of the Chaffinch.

The female is very different from the male; for the same author tells us, that the plumage and cry resemble those of the Sparrow. [A]

[A] Specific character of the Emberiza Brafilianfis: "Its top, its neck, and the under-fide of its body, yellow; its back, its wings, and its tail, variegated with yellow and brown."

M

#### İI.

#### The MEXICAN BUNTING.

La Therese Jaune, Buff. Emberiza Mexicana, Gmel.

As I have feen only the figure, and a dead specimen of this bird, I can give but an imperfect description. Its plumage is much like that of the Common Yellow Bunting; almost all the head, the throat, and the sides of the neck, are orange-yellow; the breast, and the under-part of the body, speckled with brown on a dirty white ground; the back of the head, and neck, and all the upper-part of the body, brown: this last colour tapers to a point on each side of the neck, and extends almost to the eye. The quills of the wings and tail, and their coverts, are brown, edged with a lighter brown. [A]

<sup>[</sup>A] Specific character of the Emberiza Mexicana:—" Above it is rufty; below partly white, spotted with brown; its head, and throat, yellow."

#### .III...... 11

# The YELLOW-FACED BUNTING.

La Flaveole, Buff.
Emberiza Flaveola, Linn. and Gmel.

The forehead and throat are yellow, and all the rest of the plumage gray. It is nearly of the size of the Siskin. Linnæus, who has made us acquainted with this species, informs us, that it is a native of the warm countries, but does not mention to what continent it belongs. [A]

[A] Specific character of the Emberiza Flaveola: —" It is gray; its face yellow."

#### IV.

# The OLIVE BUNTING.

L'Olive, Buff.

Emberiza Olivacea, Linn. and Gmel.

Emberiza Dominicensis, Briss.

This little Bunting, which is found in Dominica, exceeds not the fize of a Wren. All the upper-part, and even the tail, and the quills of the wings, are of an olive-green; the throat orange-yellow; there is a fpot of the same colour between the bill and the eye; the fore-part of the neck is blackish; all the under-part of the body a very light gray, tinged with olive; the anterior part of the wings edged with light yellow; the bill and legs brown.

The female has not the black neck-piece, nor the orange-yellow spot between the bill and the eye; nor is the throat orange-yellow, as in the male.

Total length three inches and three-fourths; the bill four lines and a half; the alar extent fix inches; the tail eighteen lines, confifting of twelve quills, and projecting seven or eight lines .beyond the wings.

1. [A] Specific character of the Emberiza Olivaceae - " It is olive; whiter below; its throat orange; a stripe on its breast. € blackish."

#### The AMAZON BUNTING.

L'Amazone, Buff. Emberiza Amazona, Gmel.

This bird was found at Surinam. It is of the bulk of our Titmouse; the upper-part of the head is fulvous; the inferior coverts of the wings whitish; the rest of the plumage brown.

# The PLATA BUNTING.

L'Emberise à Cinq Couleurs, Buff. Emberiza Platenfis, Gmel.

This bird was brought from Buenos-Ayres. We describe it on the authority of Commerson, who speaks only of its plumage and external

characters, and takes no notice of its manner of living, nor informs us whether it has the difcriminating properties of the species.

All the upper-part of the body is of a brown green, verging to yellow; the head, and the upper-part of the tail, of a darker tinge; the under-part of the tail has more of a yellow cast the back marked with some black streaks; the anterior edge of the wings bright yellow; the quills of the wings, and the outermost of those of the tail, edged with yellowish; the underpart of the body cinereous white; the pupil blackish blue; the iris chesnut; the bill cinereous, convex, and pointed; the edges of the lower mandible re-entrant; the nostrils covered with a membrane very near the base of the bill; the tongue terminating in small filaments; the legs lead-coloured.

Total length eight inches; the bill eight lines; the alar extent ten inches; the tail four inches; the hind nail largest of all.

M

#### VII.

# The BOURBON BUNTING.

Le Mordoré, Buff.
Emberiza Borbonica, Gmel.

The whole of the body is reddish gray, both above and below, and almost of the same shade; the coverts of the wings, their quills, and those

of the tail, are brown, edged with reddish gray, more or less dilute; the bill brown, and the legs yellowish, tinged slightly with reddish gray. It is found in the Isle of Bourbon, is nearly of the bulk of the Yellow Hammer, but its tail is shorter, and its wings longer; the former projecting about ten lines beyond the latter.

#### VIII.

#### The GRAY BUNTING.

Le Gonambouch, Buff. and Seba. Emberiza Grisea, Gmel. Emberiza Surinamensis, Brist.

Surinam, that it is of the fize of the Lark, and that it fings like the Nightingale, and confequently much better than any of the Buntings; which is extraordinary in an American bird. The people of the country fay, that it is extremely fond of maize, and often perches upon the top of the stalk.

Its principal colour is light gray, but there is a tinge of red on the breaft, the tail, the coverts, and the quills of the wings; the quills of the wings are white below.

Total length five inches; the bill five lines; the tail eighteen lines, and exceeding the wings by ten lines.

#### IX.

#### The FAMILIAR BUNTING.

Le Bruant Familier, Buff. Emberiza Familiaris, Linn. and Gmel. Motacilla Familiaris, Osb. 1t.

The head and bill are black; the upper-part of the body cinereous and spotted with white; the under-part cinereous, but without spots; the rump and part of the back that is covered by the wings, yellow; the coverts and the end of the tail, white.—This bird is found in Asia, and is nearly the size of the Siskin.

#### X.

#### The CINEREOUS BUNTING.

Le Cul-Rousset, Bust. Emberiza Cinerea, Gmel. Emberiza Canadensis, Briss.

We are indebted to Brisson for this species: the upper-part of the head variegated with brown and chesnut; the under-part of the neck, the back, and the coverts of the wings, variegated in the same manner with a mixture of gray; the rump gray without spots; the superior and inferior coverts of the tail, dirty white and rusty; the throat and all the under-part of the body, dirty-white, variegated with chefnut spots, less frequent however below the belly; the quills of the tail and of the wings brown, edged with gray, verging upon chesnut; the bill and legs brown-gray.—It was brought from Canada.

Total length five inches and a half; the bill five lines and a half; the alar extent eight inches and one-fourth; the tail two inches and a half, confifting of twelve quills, and projecting about twenty-one lines beyond the wings.

#### XI.

#### The BLUE BUNTING.

L'Azuroux, Buff. Emberiza Cærulea, Gmel. Emberiza Canadenfis Cærulea, Briff.

We are also indebted to Brisson for this Canadian bird: the upper-part of the head is dull rusous; the upper-part of the neck and of the body variegated with the same and with blue; the rusous is not so deep on the small coverts of the wings nor on the large ones, which are edged and tipt with that colour; the quills of the wings and of the tail are brown, edged with blue-gray; the bill and legs are brown-gray.

Total length four inches and one-fourth; the bill five lines; the alar extent feven inches and

one-third; the tail an inch, confisting of twelve quills, and not exceeding the wings by more than four lines.

#### XII.

### The BONJOUR COMMANDER.

This is the name which the fettlers in Cayenne give to a kind of Bunting, which frequents the dwellings and fings at day-break. Some call it the Cayenne Bunting. It resembles the one from the Cape of Good Hope so exactly, that Sonini thinks it is the same. One of the appellations ought therefore to be rejected; and this shews that all epithets of birds that are geographical are insufficient to discriminate them.

The cry is shriller than that of our Sparrows; they are generally on the ground, and like the Buntings, they are for the most part in pairs.

The male has a black hood crossed by a gray bar; the cheeks are cinereous; there is a black ray extending from the base of the bill to the hood, and below and behind it there is a rusous half-collar; the upper-part of the body is greenish-brown, variegated on the back with oblong black spots; the coverts of the wings are edged with rusty; all the under-part of the body is cinereous.

It is a little smaller than the Cirl Bunting, its total length being only five inches; its wings are short, and scarcely reach to the middle of the tail.

#### XIII.

# The RED-EYED BUNTING.

Commerson described this bird on the Isle of France, which it inhabits, and where it is called Calfat. The upper-part of the head is black, and all the upper-part of the body, including the wings and the tail, are bluish cinereous; the tail edged with black; the throat black; the breast and belly wine-coloured; a white bar stretches from the corner of the opening of the bill to the back of the head; the orbit of the eyes is naked, and rose-coloured; the iris, the bill, and the legs also rose-coloured; the inferior coverts of the tail white.

It is of a middle fize, between the Sparrow and the Linnet.

#### The BULFINCH'

Le Bouvreuil, Buff.
Loxia-Pyrrhula, Linn. and Gmel.
Coccothraustes Sanguinea, Klein.
Rubicilla, seu Pyrrhula, Aldrov. Johnst. &c.
Pyrrhula, Brist.
Rubrica, Gesner.
The Bulsinch, Alp, or Nope, Will.

fhe has bestowed upon it a beautiful plumage and a fine voice. The colours are perfect after the first moulting, but the song needs to be affisted and formed by art. In the state of freedom, the Bulsinch has three cries, which are all unpleasant: the first, which is the most common, is a fort of whoop; it begins with one, then two in succession, and afterwards three and sour, &c. and, when animated, it seems to articulate with sorce the repeated syllable tui, tui, tui; the second is an air of greater extent, but lower, almost hoarse,

<sup>\*</sup> In German, Blut-finch, Guegger, Brom-meiss, Bollen-beisser, Rot-vogel, Thumbher, Gumpel; in Swedish, Dom-berre; in Danish and Norwegian, Dom-pape, Blod-sinke; in Polish, Popek; in Prostan, Daun pfasse; in Italian, Cisolotto, Sussulueno, Fringuello Montano, Fringuello Vernino, Monachino. In Greek, it was called Συκαλις, from Συκον, a fig, on which it was supposed to feed; and also Πυρρωλας, from Πυς, fire, on account of its red plumage.



THE BULFINCH. : .

and running into a discord\*; and the third is a feeble stifled cry, which it vents at intervals, exceedingly shrill and broken, but at the fame time fo foft and delicate, that it scarcely can be heard; it emits this found much in the same way as a ventriloquist, without any apparent motion of the bill or throat, only with a fensible action of the abdominal muscles.—Such is the song of the Bulfinch when left to the education of its parents; but if man deigns to instruct it methodically †, and accustom it to finer, mellower, and more lengthened strains, it will listen with attention, and the docile bird, whether male or female ‡, without relinquishing its native airs, will imitate exactly, and fometimes furpals its master §. It also learns easily to articulate words and'

<sup>†</sup> It is faid, that to succeed in teaching the Bulfinches one should whistle to them, not with the Canary-flagcolet, but with the lipped or German-slute, whose tone is deeper and suller. The Bulfinch can also mimic the warble of other birds.

<sup>†</sup> The hen Bulfinch is the only female, it is faid, of the fing-ing-birds that learns to whiftle as well as the male. *Edonologie*, p. 18.—Olina.—Aldrovandus, &c. Some pretend that her voice is weaker and sweeter than that of the cock Bulfinch.

<sup>§ &</sup>quot;I know a curious person (says the author of the Ædonologie, p. 89.) who having whistled some airs quite plain to a Bulsinch, was agreeably surprized to see the bird add such graceful turns, that the master could hardly recognize his own music, and acknowledged that the scholar excelled him." However, it must be confessed.

and phrases, and utters them with so tender an accent, that we might almost suppose it felt their force.—The Bulfinch is besides susceptible of personal attachment, which is often strong and Some have been known, after escaping from the volery and living a whole year in the woods, to recognize the voice of the mistress, and return, to forsake her no more \*. Others have died of melancholy, on being removed from the first object of their attachment †. These birds well remember injuries received: a Bulfinch, which had been thrown to the ground in its cage by fome of the rabble, though it did not appear much affected at the time, fell into convulsions ever after at the fight of any mean looking fellow, and expired in one of these fits eight months. from the date of its first accident.

The Bulfinches spend the summer in the woods or on the mountains: they make their nest in the bushes, five or six feet from the ground, and sometimes lower: this consists of moss, lined with soft materials; and its opening is said to be the least exposed to the prevailing wind. The semale lays from sour to six eggs

fessed, that if the Bulinch be ill-directed, it acquires harsh strains. Hebert saw one which never had heard any person whistle but cauters, and which whistled like them, with the same strength and coarseness.

One of these birds which returned to its mistress, after living year in the woods, had all its feathers ruffled and tangled. Liberty has its inconveniences, especially for an animal deprayed by domestication.

of a dirty white and a little bluish, encircled near the large end with a zone, formed by spots of two colours, some of an ill-defined violet, · others of a distinct black. She disgorges the food for the young like the Goldfinches, the Linnets, &c. The male is attentive to his mate, and Linnæus relates that he fometimes holds out to her a spider in his bill a very long time. The young ones begin not to whille till they are able to eat without affistance; and then they feem instinctively benevolent, if what is related be true, that in a hatch of four, the three elder will feed their puny brother. After the breeding is over, the parents still continue affociated through the winter, for they are always feen in pairs: those which remain in the country, leave the forests, and descend from the mountains \* when the snow falls, and forfake the vineyard which they haunt in the autumn, and approach our dwellings, or lodge among the hedges by the road-fides: those which migrate, depart with the Woodcocks, about All Saints day, and return in the month of April †. They feed in summer upon all forts of seeds, infects, and forbs ‡; and in the winter, upon

<sup>\*</sup> There are many Bulinches in the mountains of Bologna, of Modena, of Savoy, of Dauphiné, of Provence, &c. OLINA.

<sup>†</sup> Many are seen about the end of autumn and the beginning of winter in the mountainous parts of Silesia, but not every year, according to Schwenckfeld.

I Linnæus.

juniper-berries, upon the buds of aspen, of alder, of oak, of fruit-trees, of the marsh-willow, &c. whence the name Ebourgeonneux (from Bourgeon), which they sometimes have in France: in that forbidding season, they are heard to whistle; and their song, though somewhat sad, cheers the torpid gloom of nature \*.

Some reckon these birds attentive and thoughtful; and their heavy air and the facility with which they are instructed seem to favour that idea; but, on the other hand, their allowing one to get near them, and their being decoyed. into the different snares +, indicate want of circumspection. As their skin is very tender, those which are caught with bird-lime lofe, in struggling to escape, part of their down, and even of their quills, unless a person speedily disentangles them. It deserves to be remarked, that those which have the finest plumage are the least capable of instruction, being older and not fo tractable: but even the old ones are foon reconciled to the cage, provided that at first they have plenty of food; they can also be properly tamed, as I have already noticed, though to fucceed requires time and patient attention, which is the reason that persons sometimes fail in the attempt. It feldom happens that one is caught alone; the

<sup>\*</sup> In the cage they eat hemp-seed, biscuit, prunes, sallad, &c. Olina recommends for the young ones the Nightingale's paste made with walnuts, &c.

<sup>7</sup> Gesner caught many of them during the winter, by a bait of night-shade berries.

other is foon enticed to follow its companion, and facrifices its freedom to the calls of friendship.

'It has been afferted that the Canary, which breeds with fo many other species, will never submit to the embrace of the Bulfinch, and it is alleged as the reason, that the cock Bulfinch, when in heat, holds his bill open, which frightens the Canary. But the Marquis de Piolenc affures me, that he faw a Bulfinch pair with a hen Canary, which had five young ones about the beginning of April: their bill-was larger than that of Canaries of the same age, and they began to be covered with a blackish down, which feemed to flew that they had more of the father than the mother: unfortunately they all died in performing a short journey. What adds more weight to this observation, Frisch gives directions for the experiment: he advises that the cock Bulfinch be the smallest of its kind, and be kept long in the same volery with the hen Canary: he subjoins, that sometimes a whole year elapses before the female will allow the Bulfinch to come near, or to eat out of the same tray; which shews that the union is difficult but not impossible.

It has been observed that the Bulinches jerk their tail briskly upwards and downwards, though not in so remarkable a degree as the Wagtails. They live five or six years; their slesh is palatable according to some, and not sit to be eaten according

according to others, by reason of its bitterness; this must depend upon the age, season, and food-They are of the fize of the House-Sparrow, and weigh about one ounce. The upper-part of the head, the ring round the bill, and the origin of the neck, are fine glossy black, which extends more or less forwards and backwards'\*; the fore-part of the neck, the breaft, and the top of the belly, beautiful red; the abdomen, and the inferior coverts of the tail and wings, white; the upperpart of the neck, the back, and the shoulders, cinereous; the rump white, the superior coverts and the quills of the tail, fine black, verging to violet, a whitish spot on the outermost quills; the quills of the wings blackish cinereous, and deeper the nearer to the body: the last of all red on the outlide; the great coverts of the wings of a fine changing black, terminated with reddish, light-gray; the middle ones cinereous; the fmall ones, blackish ash-colour, edged with reddish; the iris hazel; the bill blackish, and the legs brown...

The sides of the head and the fore-part of the neck, the breast, the top of the belly, and in a word, almost all that was red in the male, is vinous ash-colour in the female, and sometimes even the abdomen: nor has it the sine glossy changing black that occurs on the head

Hence the name of Monk, or Pope, which this bird has in many languages, and that of Coally-bood, given to it by the people is Scotland.

and other parts of the male. I have seen a female however, which had the last of the wingquills edged with red, and which had no white on the outermost of those of the tail. Linnæus adds, that the tip of the tongue is divided into small filaments; but I have always found it quite entire in the male, and shaped like a very short tooth-pick.

In many young Bulfinches which I have observed about the end of June, the fore-head was light rusous, the fore-part of the neck and breast 'rusty-brown; the belly and the inferior coverts of the tail sulvous, which extends and grows more dilute on the side; the under-part of the body, more or less dusky; the white ray over the wing deeply tinged with rusty; the rump white of different shades.—But it is obvious that considerable diversities will occur.

Total length fix inches; the bill five lines, thick and forked; Kramer remarks, that the two mandibles are moveable, as in the Finches and Buntings; the alar extent nine inches and one-fourth; the tail two inches and one-third, somewhat forked, (but not always in the females,) confisting of twelve quills; the outer-toe joined by its first phalanx to the mid-toe; the hind-nail stronger and more hooked than the rest.

The dimensions of the female when dissected were as follows:—intestinal tube eighteen inches; vestiges of a cacum; the assophagus two inches vol. IV.

and a half, dilated like a bag, with a projecting edge next the gizzard, which is muscular, containing many small pebbles, and even two or three small yellow seeds quite entire, though the birds had remained two days and a half in the cage without eating; the cluster of the ovarium of an ordinary size, and the small eggs nearly equal; the ovi-duct spread, and above three inches in length; the trachea formed a fort of knot of a considerable thickness, where it forked.

# VARIETIES of the BULFINCH.

Sir Robert Sibbald has only a fingle line on the Bulfinch, and fays, that there are several kinds of it in Scotland: these are probably only the varieties which we shall now describe.

Frisch tells that the Bulfinches may be divided into three different sizes: the Marquis de Piolenc was acquainted with two distinguished by their bulk\*: and others pretend that those of Nivernois are smaller than those of Picardy. Lottinger assures us, that the Bulfinch of the mountains exceeds that of the plain; and this

<sup>•</sup> The smallest, adds M. de Piolenc, is of the fize of the Chaffinch, its body is longer, its breast of a brighter red; and it seems wilder than the ordinary Bulsinch.

accounts, for the diversity of bulk, being variously modified by local situation. But these are too numerous to be separately treated: and I shall here take notice only of the varieties of plumage.

I. The WHITE BULFINCH\*. Schwenckfeld speaks of a White Bulsinch that was caught
near the village of Frischbach in Silesia, and
which had only some black feathers on the back.
This fact is confirmed by Delisle: "There are
"in this canton, (of Beresow in Siberia,) says
"that excellent astronomer, White Bulsinches,
"whose back is somewhat blackish, and gray in
"summer: these birds have a delicate pleasant
"song, much superior to that of European
"Bulsinches." It is probable that the northern
climate has much contributed to this change of
plumage.

II. The BLACK BULFINCH †. Under this denomination, I include not only those which are entirely or almost black, but also those which have perceptibly begun to assume that complexion:—such was what I saw at Baron Goula's; its throat and rump were black; the inferior coverts of its tail, its lower belly, and the top of its breast, variegated with rusous wine-colour and black, and no white spots ap-

Loxia-Pyrrbula, var. 2. Linn. Loxia-Pyrrbula, var. 1. Linn.

peared upon the last quill of the tail. Those mentioned by Anderson and Salerne were entirely of a jet black; that, of Reaumur noticed by Brisson, was black over the whole body. I have observed one which assumed a fine glossy black after the first moulting, but which still retained a little red on each fide of the neck, and a little gray behind the neck, and on the small superior coverts of the wings; its legs were flesh-coloured, and the inside of its bill red: that of Albin had some red feathers under the belly; the five first quills of the wing edged with white; the iris white, and the legs fleshcoloured\*. Albin remarks that this bird was exceedingly gentle, like all the Bulfinches. It often happens that this robe of black disappears in moulting, and gives place to the natural colours: but often it renews each time, and remains for feveral years: - fuch was the cafe. with Reaumur's. This would imply that the change of colour is not the effect of disease.

III. The GREAT BLACK AFRICAN BUL-FINCH +. Though this bird is a native of a distant country, and exceeds the fize of the European Bulfinch, I am still inclined to regard

<sup>•</sup> Mr. White, in his Natural History of Selburne, relates also an instance of a cock Bulsinch turning dingy, and afterwards black.

<sup>+</sup> Loxia Panicivora, Linn. and Gmel. Pyrrhula Africana Nigra, Brist. The White-winged Großeak, Lath.

it as analogous to the variety which I have deficibed by the name of the Black Bulfinch, and to suspect that the burning climate of Africa communicates a black hue to the plumage, as the cold of Siberia introduces a snowy white. It is entirely black except a very small white spot on the great coverts of the wing; and also the bill is gray, and the legs ash-coloured. It was brought alive to Paris from the coasts of Africa.

Total length, seven inches and one-fourth; the bill fix lines; the alar extent four inches and one-fourth; the tail two inches and a half, confisting of twelve quills, and exceeding the wings eighteen lines. [A]

Its joints are black, the coverts of the tail and of the hind quills of its wing white. Thus described by Briffon: Above circle nereous, below red, (Male), wine-cinereous, (Female): the top of its head of a shining black; its rump and lower-belly white; its tail-quills violet-black, the lateral ones blackished cinereous within, the outermost on both sides marked interiorly with a whitish spot. In England the Bulsinch breeds in the end of May for the beginning of Junes, it is pernicious to our gardens.

# FOREIGN BIRDS, which are related to the bulfinch.

I.

### The ORANGE GROSBEAK, Lath.

Le Bouveret, Buff. Loxia Aurantia, Gmel.

I class together two birds, the one from the Isle of Bourbon, and the other from the Cape of Good Hope: they resemble each other so closely, that they must belong to the same species; and there is, besides, an intercourse between these two places.

Black, and bright orange, are the prevailing colours in this bird, fig. 1. which I conceive to be the male: the orange is spread on the throat, the neck, and on all the body, without exception; black occupies the head, the tail, and the wings; but the wing-quills are bordered with orange, and some of them tipt with white.

In the female, all the head, the throat, and the fore-part of the neck, are covered with a fort

fort of black cowl; the under-part of the body is white; the upper-part orange, not so bright as in the male, but spreads diluting on the quills of the tail; the quills of the wings are delicately edged with light-gray, almost white: in both, the bill and legs are reddifh.

Total length about four inches and a half; the bill fomewhat less than four lines; the alar extent near feven inches; the tail twenty lines, confisting of twelve quills; it exceeds the wings about fifteen lines. [A]

[A] Specific character of the Loxia Aurantia :- " It is fulvous; " its cap, wings, and tail black."

#### ÏÌ.

# The WHITE-BILLED GROSBEAK, Lath.

Le Bouvreuil, à Bec Blanc, Buff. Loxia Torrida, Gmel.

This is the only bird of Guiana that Sonini. admits to be a true Bulfinch. Its bill, in the dried specimen, is horn-colour; but we are asfured that it is white in the living subject: the throat, the fore-part of the neck, and all theupper-part of the body, not excepting the wings and the tail, are black; on the wings is a small white spot, which often lies concealed X 4

under

under the great coverts; the breast and belly are deep chesnut.

This bird is of the fize of our Bulfinch; its total length four inches and three-fourths, and its tail exceeds the wings by almost its whole length. [A]

[A] Specific character of the Loxia Torrida: - It is black,

# III.

### · The LINEATED GROSBEAK, Lath.

Le Bouveron , Buff.

Loxia Lincola, Linn. and Gmel.

Pyrrhula Africana Nigra minor, Briff.

This bird feems to form the shade between the European Bulfinches and the Round-bills of America. It is not larger than the Twite: a fine black, changing into green, is spread over the head, the throat, and all the upper-part of the body, including the coverts and quills of the tail and of the wings, or more properly speaking on what appears of these; for the inside is either not black, or is black of a different kind: there is also a very small white spot on each wing, and three spots of the same colour, but larger, the one on the top of the head, and the

P Contracted for Bouvreuil-Ree-rend, (Bulfinch-Round-bill.)

two other below the eyes. All the under-part of the body is white; the feathers of the belly and the inferior coverts of the tail are frizzled in some subjects, for we may reckon the Frizzled Bulfinch of Brazil as belonging to this species, fince the fole difference confifts in the contexture of the plumage, which is superficial and fluctuating. It is probable that Frizzled Bulfinches are cock-birds. Nature feeming in general to diffinguish the males by ftrength and beauty. But how, it would be asked, is the male found in Brazil, and the female in Africa? I answer. 1. That the native climater of birds that pass through different hands is very uncertain. 2. If these were brought alive to Paris, they might also have been carried from South America Any person who will draw the to Africa. comparison between these two birds, will readily admit one of the two suppolitions, rather than refer them to two different species.

Total length four inches and one-third; the bill four lines; the alar extent feven inches and a half; the tail twenty-one lines, confifting of twelve quills, and exceeding the wings about, an inch. [A]

<sup>[</sup>A] Specific character of the Loxia Lincola; It is black; the frontel line, and temples white.

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#### IV.

### The MINUTE GROSBEAK, Lath.

Le Bec-Rond à Ventre Roux, Buff. Loxia Minuta, Linn. and Gmel. The Gray Loxia, Bancr. Guian.

America produces also Round-bills, which, though analogous to the Bulfinches, are still so different as to merit a distinct denomination.

The present continues the whole year paired with its semale. It is lively and tame, living near dwellings, and haunting grounds which have been under cultivation, but lately abandoned. It seeds upon grain and fruits; and, hopping about, it emits a cry much like that of the Sparrow, but shriller. It forms with a certain reddish herb a small round nest of about two inches diameter within, and places it in the same shrub that furnishes its subsistence. The semale lays three or four eggs.

The upper-part of the head, the neck, and the back, are brown-gray; the coverts of the wings, their quills, and those of the tail, are of the same colour nearly, and bordered with white, or light chesnut; the throat, the fore-part of the neck, the under-part of the body, the inferior coverts of the tail, and the rump, deep chesnut; the bill and legs brown.

In some subjects the throat is of the same brown gray as the upper-part of the head. [A]

<sup>[</sup>A] Specific character of the Loxia Minuta:—" It is gray; its rump, and the under-fide of its body, ferruginous; the four, five, or fix wing-quills, white on both fides at their base; its tail entire."

#### V.

### The BLUE GROSBEAK.

Le Bec-Rond, on Bouwreuil-Bleu d'Amerique, Buff. Loxia Cærulea, Linn. and Gmel. Pyrrhula Carolinensis Cærulea, Briss. and Klein.

Brisson mentions two American blue Bulfinches, of which he makes two separate species: but as they are both natives of the same climate, are of the same size, of the same shape nearly, and, except the wings, tail, and bill, are of the same blue colour; I shall consider them as forming one single species, and regard the differences as resulting from the influence of climate.

In both of them the prevailing colour is deep blue. The one from South America has a small black spot between the bill and the eye; the quills of the tail, those of the wings, and the great coverts of these, are edged with blue; the bill is blackish, and the legs gray.

That of North America has at the base of its bill a black circular zone, which extending forms a junction between the eyes; the quills of the tail and those of the wings, and their great coverts, brown, tinged with green; their middle coverts red, forming a transverse bar of the same colour; the bill brown, and the legs black. The plumage of the semale is uniform, and of a deep brown, intermixed with a little blue.

With respect to the habits and economy of these birds, we can make no comparison, since we are unacquainted with those of the first. Catesby informs us in regard to the one from Carolina, that it is very solitary and rare; that it continues paired with its female, and never appears in slocks; that it never winters in Carolina; that its song is monotonous, and consists of a repetition of the same note. In all these properties the analogy to our Bulfinch is marked. [A]

[A] Specific character of the Loxia Cærulea: —" It is cærulean; its wings dulky, with a purple bar at the base."

#### VI.

#### The BLACK GROSBEAK.

Le Bouvreuil ou Bec-Rond Noire & Blanc. Buff. Loxia Nigra, Linn. Gmel. and Klein. Pyrrbula Mexicana Nigra, Briff. The Little Black Bulfinch, Cates. Alb. and Bancr.

As we have neither feen this bird, nor the dried specimen, we cannot decide whether it is a Bulfinch or a Round-bill. It has a little white on the anterior edge, and on the base of the two first quills of the wing; all the rest of the plumage is quite black, and even the bill and the legs; the upper mandible has a considerable scalloping on each side.

This bird is a native of Mexico. It is nearly of the fize of the Canary Finch; total length five inches and one fourth; the bill five lines; the tail two inches, and exceeding the wings one inch. [A]

[A] Specific character of the Loxia Nigra: —" It is black, with a white spot on the shoulder, and at the base of the two exterior wing-quills:"

VII. The

### VII.

### The PURPLE FINCH.

Le Bouvreuil ou Bec-Rond Violet de la Caroline, Buff-Fringilla Purpurea, Gmel. Pyrrbula Carolinensis Purpurea, Briss.

This bird is entirely of a dull violet, except the belly, which is white; the superior coverts of the wings where the violet is slightly mixed with brown, and the quills of the tail and of the wings which are parted by blue and brown, the former in the direction of their breadth, and the latter in that of their length.

The female is uniformly brown, only its breakt is spotted, as in the Red-poll.

These birds appear in the end of November, and retire before the winter in small bodies. They live upon juniper-berries, and like our Bulfinches destroy the buds of the fruit-trees. They are nearly of the size of the Chassinch.

Total length five inches and two-thirds; the bill five lines; the tail two inches, somewhat forked, consisting of twelve quills, and projecting seven or eight lines beyond the wings. [A]

[A] Specific character of the *Fringilla Purpurea*:—" It is olive; "its belly whitish; its wing-quills dusky within." It appears in Carolina in November, and feeds upon juniper-berries.

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## VIÌI.

#### The PURPLE GROSBEAK.

Le Bouvreuil ou Bec-Rond Violet à Gorge & Sourcils Rouge, Buff.
Loxia Violacea, Linn. and Gmel.
Pyrrhula Bahamensis Violacea, Briss.
Coccothraustes Purpurea, Klein.
Passer Niger Punctis Croceis, Ray, and Sloane.

This has still more of the violet than the preceding, for the quills of the wings and tail are also of that colour; but it is principally distinguished by its red throat, and its beautiful red eye-brows painted on the violet ground; the inferior coverts of its tail are also red, and its bill and legs are gray.

The female has the same red spots as the male, but the ground colour of its plumage is brown.

These birds are found in the Bahama Islands.

They are nearly as large as a House-sparrow.

Total length five inches and two-thirds; the bill five or fix lines; the tail two inches and a half, and projects thirteen or fourteen lines beyond the wings. [A]

[A] Specific character of the Loxia Violacea:—" It is violet; "its eye-brows, its throat, and its vent, white." It inhabits the Bahama Islands, and feeds upon the berries of the Amyris Toxifera, a tree from whose trunks a black possonous juice exudes.

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#### IX.

### The BLACK-CRESTED GROSBEAK.

La Huppe Noire, Buff. Loxia Coronata, Gmel. Pyrrbula Americana Cristata, Brist.

The plumage of this bird is painted with the richest colours; the head black, bearing a crest of the same; the bill white; all the upper-part of the body brilliant red; the under-part sine blue; there is a black spot before the neck. This justifies the affertion of Seba, that it is inferior in beauty to none of the singing birds. We may thence infer that it has some fort of warble. It is found in America.

Brisson reckons it much larger than our Bulfinch. The measures were taken from a figure, whose accuracy is not well ascertained.—Totallength six inches; the tail eighteen lines and more, and projecting about six lines beyond the wings. [A]

<sup>[</sup>A] Specific character of the Loxia Coronata:—" It is scarlet; below corulean; the crest on its head, and the middle spot on its throat, black."

#### The HAMBURGH.

L'Hambouvreux, Buff.
Pyrrhula Hamburgensis, Briff.

Though this pretended Bulfinch is a native of Europe, I place it after those of Africa and America, because its habits are dissimilar. It creeps upwards and downwards along the branches of trees like the Titmice; feeds upon horn-beetles, and other insects; and has a tapered tail.

The upper-part of its head and neck is reddish brown, tinged with purple; its throat brown; it has a broad collar likewise brown upon a white ground; the breast is yellowish brown, sprinkled with black longish spots; the belly, and the inferior coverts of the tail, white; the back, the shoulders, and all the upper-part of the body, like the breast; there are two white spots upon each wing; the quills of the wings are light brown and yellowish; those of the tail, obscure brown above, but white below; the iris yellow, and the bill black.

It is rather larger than the House-sparrow.—
It is found near the city of Hamburgh.

Total length five inches and three-fourths; the bill fix lines; the tail twenty-one lines, fomewhat tapered, and extends almost its whole length beyond the wings.

N.º105



THE COLY.

## The COLY

Le Coliou, Buff.

Tr appears to us that this bird should be ranged between the genus of the Widow and of the Bulfinch. Like the former, it has two long feathers in the middle of its tail; and the latter it refembles by the form of its bill, which would be exactly that of the Bulfinch, were the lower mandible convex as the upper. But the tail of the. Coly differs from that of the Widow, because it confifts of tapered feathers, of which the two last project only three or four inches beyond the rest; whereas the Widow-bird, besides the true tail, which is a bundle of feathers of equal lengths attached to the rump, has appendices that in the different species of this genus contains two, four, and even fix or eight feathers, extending to double or triple the length of the In the Widow-birds too the webs of the projecting feathers are equal on both fides, and pretty long, and taper imperceptibly from the origin to the extremity, except in the Dominican and Shaft-tailed kinds; the former having its webs very short, and quickly contracting towards the tips; the latter also very short, but which uniformly lengthen and expand at the tips. In all the Colies, the feathers of the tail, whether those which properly belong to it, or those which project from it, have vanes that conti-VOL, IV. Y

continually diminish from the insertion to the termination. Thus the real affinity between the tail of the Widow birds, and that of the Colies, consists in its length; and this analogy is the colosest in the case of the Dominican Widow.

M. Mauduit has made two important observations on this subject. The first is, that the long tails, the appendices, and other ornaments of certain birds, are not peculiar additions, but only the greater extension of the parts common to all the feathered tribes. Thus long tails confift in the augmented growth of the quills of the tail; and crests are derived from the enlargement of the feathers on the head. The multachoes of the Paradife bird appear to be only the production of the flender narrow plumules, which in all birds cover the meatus auditorius externus\*. The exuberant growth of the axillary feathers give rife to the long floating feathers which shoot from under the wings in the Common Paradife, and of those which present the double wings in the King Paradife. When these feathers lie flat, they stretch towards the tail; but when they are displayed they make angles with the axis of the They differ from all other feathers, as their webs are equal on both fides of the shaft. They resemble oars, and may serve to direct the -bird's motion. And thus all the ornaments of plumage are derived from the mere exuberance or production of parts usually less apparent.—

<sup>\*</sup> i. s. The external aperture of the ear.

The second observation of M. Mauduit is, that these decorations are fare in the cold and temperate climates in both hemispheres, but are pretty frequent in the hot countries, especially in the old continent. Scarce any long-tailed birds are found in Europe, except the Phealant, the Cock, which also is often crested, and has long floating feathers on the fides; the Magpie, and the longtailed Titmouse; and we have hardly any crested birds but the Eared Owls, the Lapwing, the Crested Lark, and the Crested Titmouse. Some water-birds indeed, such as the Ducks and Herons, have frequently long tails, or ornaments composed of plumes, tufts, and feathers'floating on the rump.—These are all the birds which the frigid and temperate zones afford, decorated with luxuriance of plumage. But in the torrid regions, especially those of the old continent, the greatest number of birds are robed with such rich attire: we might instance the Colies, the Paradise birds, the Kakatoes, the Widows, the Crowned Pigeons, the Hoopoes, the Peacocks, which are all natives of the hot climates of Asia, &c.

The Colies belong to the ancient continent, and are found in the warm parts of Asia and Africa, but never in America or Europe.

We are but imperfectly acquainted with four species or varieties, of which we can here give only the descriptions; for their habits and instances are unknown.

- 1. The Coly of the Cape of Good Hope\*, which we have described from a specimen in the king's cabinet. We cannot decide whether it is a male or a female. The body is entirely cinereous, pure on the back and rump, and mixed on the head; the throat and neck have a light lilac tint, which deepens on the breast; the belly is dirty white; the quills of the tail are cinereous, but the two lateral ones on each fide are edged exteriorly with white; the two intermediate quills measure fix inches and nine lines; those on the fides diminish gradually in length; the legs are gray, and the nails blackish; the bill is gray at its base, and blackish at its extremity. The length of the bird, including the long quills of the tail, is ten inches and three 'lines: so that the real fize of the body exceeds not three inches and a half.—It is found at the \*Cape of Good Hope. [A]
- [A] Specific character: "The outmost wing-quills white externally; the body cinereous; below whitish"
- 2. The Crested Coly of Senegal † resembles the preceding, and may be regarded as a variety of that species, though it differs in point of size, being two inches longer. It has a fort of crest formed by projecting feathers on the head, and

Colius Capenfis, Gmel. Loxia Capenfis, Linn. The Cape Coly, Lath. Colius Scnegalenfis, Gmel. The Senegal Coly, Lath. which is of the same complexion as the rest of the body; there is a well-defined bar of sine: sky-blue behind the head, at the origin of the neck; the tail tapers from its base to its extremity; the bill is not entirely black; the upper mandible is white from its base to two-thirds of its length, and its end is black.—These differences, though considerable, do not allow us to decide whether this bird be a different species, or only a variety of the preceding. [A]

[A] Specific character:—" Mixed with pale gray and winegolour; the tail bluish; the head crested."

3. Another species or variety rather larger than the last is the Radiated Coly\*, which we have seen in Mauduit's cabinet. It is thirteen inches long, including the long quills of the tail, which are only eight inches and a half, and exceed the wings by seven inches and a half; the bill is nine lines, black above, and whitish below.

It is called Radiated Coly, because all the upper-part of the body is radiated first under the throat with brown bars on a rusty gray ground, and under the belly with bars likewise brown on a rusous ground; the upper-part of the body 'is not radiated, is of a dirty gray, variegated slightly with lilac, which becomes more reddish on the rump and tail, which is green, and exactly similar to that of the other Colies.

Colius Striatus, Gmel. The Radiated Coly, Lath.

Mauduit, to whom we owe our knowledge of this bird, thinks that it is a native of the countries near the Cape of Good Hope, because it was brought from the Cape, with several other birds that certainly belong to that part of Africa. [A]

[A] Specific character: - "Gray; belly rufous, painted with black transverse stripes; tail green."

4. The Coly of the Island of Panay\*. We shall extract the account of it from Sonnerat's Voyage to New Guinea.

" It is of the fize of the European Grosbeak; the head, the neck, the back, the wings, and the tail, are ash-gray, with a yellow tinge; the breast is of the same colour, croffed with blackish rays; the lower-part of the belly, and the upper-part of the neck are rufty; the wings extend a little beyond the origin of the tail, which is extremely long, confisting of twelve unequal quills; the two first are very short; the two following on each fide are longer, and thus in the fuccessive pairs till the two last, which exceed all the rest; the fourth and fifth pairs differ little from each other, in regard to length; the bill is black; the legs are pale flesh colour; the feathers that cover the head are narrow, and pretty long, and form a crest, which the bird can raise or depress at pleasure." [B]

<sup>[</sup>B] Specific character:—" Cinereous, tinged with yellow; ba- low rusous; breast striped with black; head crested."

<sup>\*</sup> Colius Panayensis, Gmel. The Panayan Coly, Lath.



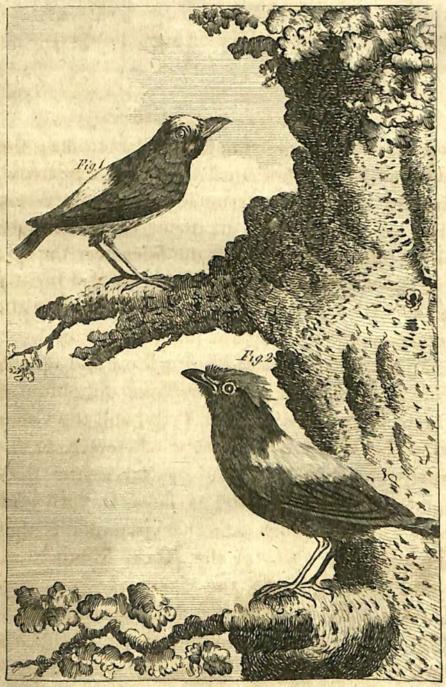


FIG.1. THE MANAKIN. FIG. 2, THE CRESTED MANAKIN.

# The MANAKINS.

Pipræ, Linn.

HESE birds are small and handsome; the largest are not equal in size to a Sparrow, and the others are inferior to that of the Wren. The general characters are these: the bill is short, strait, and compressed on the sides near the tip; the upper-mandible is convex above, and slightly scallopped on the edges, rather longer than the lower-mandible, which is plain and straight.

In all these birds, the tail is short and squared cut, and the toes have the same disposition as the Cock of the Rock, the Tody, and the Calao, viz. the mid-toe is closely connected to the outer-toe by a membrane, as far as the third joint, and the inner-toe as far as the first joint only. But as much as in that circumstance they resemble the Cock of the Rock, so much are they removed from the Cotingas: yet some authors have ranged the Manakins with the Cotingas\*; others have joined them with the Sparrows †, with the Titmice ‡, with the Linnets §, with the Tanagres ||, and with the Wren ¶;

<sup>\*</sup> Edwards. † Klein. † Linnæus. § Klein. | Marcgrave, Willughby, Johnston, Salerne, &c. ¶ Gerini.

other nomenclators are more culpable for denominating them Pipra, or for classing them together with the Cock of the Rock\*, to which they bear no analogy, except in this disposition of the toes and in the square shape of the tail: for, besides the total disproportion in size, the Cock of the Rock being as large, compared with the Manakins, as the common hen contrasted with a Sparrow, there are many other obvious characters which distinguish them: their bill is much shorter in proportion, they are generally not crested, and in those which have sa crest, it is not double, as in the Cock of the Rock; but formed by fingle feathers, somewhat longer than. the rest. We ought therefore to remove from the Manakins, not only the Horn-bills, but the Cock of the Rock, and reckon them an independent genus.

The natural habits common to them all were not known, and the observations which have been made are still insufficient to admit an exact detail. We shall only relate the remarks communicated to us by Sonini of Manoncour, who saw many of these birds in their native climates. They inhabit the immense forests in the warm parts of America, and never emerge from their recesses to visit the cleared grounds or the vicinity, of the plantations. They say with considerable swiftness, but always at a small height,

and to short distances; they never perch on the fummits of trees, but on the middle branches; they feed upon small wild fruits; and also eat infects. They generally occur in small bodies of eight or ten of the same species, and sometimes intermingled with other flocks of the same, genus, or even of a different genus, such as the Cayenne Warblers, &c.. It is commonly in the morning that they are found thus affembled, and then feem to be joyous; and warble their delicate little notes; the freshness of the cair feems to inspire the fong, for they are silent during the burning heat of the day, and disperse and retire to the shade of the thickest parts of the forests. This habit is observed indeed in many kind of birds, and even in those of the woods of France, where they collect to fing in the morn! ing and evening; but the Manakins hever affemble in the evening, and continue together only from fun-rise to nine-or ten o'clock in the forenoon, and remain leparate during the rest of the day and the fucceeding night. In general, they prefer a cool humid fituation, though they never frequent marshes or the margins of lakes. The name of the Manakin was bestowed on these birds by the Dutch settlers ar Surinant. We know fix distinct species, but we can only give the first the appellation which it has in its native region.

## The TIGE, or GREAT MANAKIN.

Le Tijé; ou Grand Manakin, Buff.

Pipra-Pareola! Linn. Gmel. and Browsk.

Manacus Cristatus Niger, Briss.

Tijé-guacu of Marcgrave, Will.

The Blue-backed Manakin, Lath. and Edw.

## First Species.

This species has been well described by Marcgrave. It is the largest of all the Manakins; its
total length is four inches and a half, and it is
nearly of the bulk of a Sparrow; the upper-part
of its head is covered with fine red feathers, longer
than the rest, and which the bird can erect at
pleasure, which gives it the appearance of being
crested; the back and the small superior coverts
of the wings are of a beautiful blue, the rest of
the plumage is velvet black; the iris is of a fine
sapphire colour; the bill is black, and the legs
are red.

The Abbe Aubry, Rector of St. Louis, has in his cabinet a bird by the name of Tife-guacu of Cuba, which is perhaps a variety of the prefent, arising from the difference of age or sex; the only distinction being, that the large feathers on the upper-part of the head are of a diluter red, and even somewhat yellowish. The defignation given to it would seem to imply that

it is found in the Island of Cuba, and perhaps in other parts of America; but it is very rare at Cayenne, and is a bird of short flight, and therefore it could hardly pass from the continent to Cuba.

The Green Manakin with a red crest is the young of this species; several Manakins have been observed, whose plumage was interspersed with blue feathers, but the green is obscure. These birds must be frequent in the warm climates of America, for we often received them along with other birds. [A]

[A] Specific character of the Blue-backed Manakin, or Pipra-Pareola: + a Its crest is blood-colour, its body black, its back of blue?

### NUT - CRACKER.

Le Casse-Noisette, Buff. Pipra-Manacus, Linn. and Gmel. Manacus, Briff. The Black-capped Manakin, Edw. and Lath.

## Second Species.

We apply this name, because the cry of this bird is exactly like the noise made by the small instrument with which we crack nuts. It has no other fong or warble; it is pretty common in Guiana, especially in the skirts of the forests; for, like the other Manakins, it shuns the say vannas vannas and cleared grounds. The Nut-crackers live in small flocks with the other Manakins, but intermingle not with them; they remain for the most part on the ground, and rarely perch on the branches, and then they uniformly prefer the low ones. They seem to live more upon insects than fruits: they are often found among the lines of ants, which sting their feet, and make them hop and utter their nut-cracking cry, which they repeat very often. They are very lively and frisky; they are seldom at rest, though they only hop, and cannot sly fat.

The plumage is black on the head, the back, the wings, the tail, and white on all the rest of the body; the bill is black and the legs yellow., [A]

[A] Specific character of the Black-caped Manakin, Pipra-Manacus: — "Black, below white, spot on the neck and the usings white."

## The RED MANAKIN.

Le Manakin Rouge, Buff.

Pipra-Aureola, Linn. and Gmel.

Manacus Ruber, Briff.

The Red and Black Manakin, Edw. and Lath.

## Third Species.

The male is of a fine vivid red on the head, the neck, the upper-part of the back, and the

the breast; orange on the forehead, the sides of the head, and the throat; black on the belly, with some red and orange feathers on the same part; black also on the rest of the upper-part of the body, the wings, and the tail; all the quills of the wings, except the first, have near the middle, and on the inside, a white spot, which forms a bar of the same colour when the wing is displayed; the top of the wings is of a very deep yellow; their inferior coverts are yellowish; the bill and legs are blackish.

In the female, the upper-part of the body is olive, with a flight appearance of a red crown on, the head; the under-part of the body is olive-yellow; the shape and bulk are the same as in the male.

In the young bird, all the body is olive, with red fpots on the forehead, the head, the throat, the breaft, and the belly.

It is the most common of all the species of Manakins in Guiana. [B]

<sup>[</sup>B] Specific character of the Red Manakin, Pipra Aureola:

Black, head and breast scarlet, white spot on the fore-part of
the wing-quills."

#### The ORANGE MANAKIN.

Le Manakin Orangé, Buff.
Pipra-Aureola, var. Linn.
'Manacus Aurantius, Briff.
The Black and Yellow Manakin, Edw. and Lath.

## Fourth Species .;

Edwards is the first author who has given a figure of this bird; but he was mistaken in supposing it to be the female of the preceding. We have just described the female of the red Manakin, and the present is undoubtedly a different species, since it is extremely rare in Guiana; whereas the Red Manakin is very common. Linnæus has fallen into the same error, because he only copies Edwards.

The head, the neck, the throat, the breaft, and the belly are of a fine orange, all the rest of the plumage being black; only the wings are marked with some white spots as in the Red Manakin; like that bird too, it has blackish legs, but a white bill, so that notwithstanding the similarity in the bar on the wings, in the colour of the legs, and in the bulk and shape of the body, it cannot be regarded as a variety of the Red Manakin.

I. The GOLD-HEADED MANAKIN\*.

II. The RED-HEADED MANAKIN†.

III. The WHITE-HEADED MANAKIN‡.

Fifth Species.

We presume that these three birds are only varieties of the same species, for they are exactly of the same size, being only three inches and eight lines in length; whereas all the preceding species, which have been placed in the order of their magnitude, are four inches and a half, and four inches and three-fourths, &c. These three are likewise of the same shape, and even their colours are fimilar, if we except those of the head, which in the first are of a fine yellow, in the fecond of a bright red, and in the third of a beautiful blue; there is no other sensible difference in the plumage, which is all uniformly of a fine gloffy black: the feathers which cover the thighs are of a pale yellow, with an oblong spot of bright red on the exterior surface. In

<sup>\*</sup> This is the Pipra Erythrocephala of Linnaus and Gmelin, the Manacus Aurocapillus of Briffon, and the Gold-headed Black Titmouse of Edwards.

<sup>†</sup> This is a variety of the Pipra Erythrocephala of Linnaus, and Willughby's fecond kind of Tangara.

<sup>†</sup> This is the Pipra Leucocilla of Linnæus, in his last edition, the Parus Pipra in the eleventh edition, the Pipra Leucocapilla of Gmelin, and the White-capped Manakin of Edwards and Latham.

the first indeed, the bill is whitish and the legs black; in the second, the bill is black and the legs cinereous; and in the third, the bill is browngray, and the legs reddish: but these slight differences do not appear sufficient to constitute three separate species, and perhaps one of them is only the female of another. However, Mauduit, to whom I communicated this article, assured me that he never faw, in the White-headed Manakin, the red feathers that cover the knee in the Golden-headed Manakin: if this difference were invariable, we might infer that these formed two separate species of Manakins': but Sonini assured us, that he has seen Whiteheaded Manakins with red feathers on their knees, and there is some reason to suspect that the specimens observed by Mauduit were mutilated.

These Manakins are found in the same situations, and are pretty common in Guiana. It would even appear that the species is spread through the several other warm countries, as Brazil and Mexico. We have learnt nothing particular in regard to their instincts and economy. We are certain only that, like the other Manakins, they constantly live in the woods, and that they have the chirping common to the whole genus, except the Nut-cracker. [A]

<sup>[</sup>A] Specific character of the Pipra Gutturalis: - "It is black, its throat white."

## The WHITE-THROATED MANAKIN.

Pipra Gutturaiis, Linn. and Gmel. Manacus Gutture Albo, Briss.

### V A R I E T Y.

This differs from the preceding by the colours of its head, which is glossy black like the rest of the plumage, except a kind of white collar which rises on the neck, and tapers to a point on the breast. It is exactly of the same size as the three preceding, being only three inches eight lines in length. We know not from what country it is brought, having seen it only in private cabinets, where it was mentioned by this name without any other indication. Sonini never met with it in Guiana; however, it is probably, like the three others, a native of the warm climates in America.

## The VARIEGATED MANAKIN.

Manacus Serena, Gmel.

Manacus Alba Fronte, Briss.

The White-fronted Manakin, Lath.

#### Sixth Species.

We have given the epithet of variegated, because the plumage is interspersed with spots of yol. iv. z different different colours, which are all very beautiful and distinct. The forehead is of a fine dead white; the crown of the head is of a beryl colour; the rump of a brilliant blue; the belly of a shining orange, and all the rest of the plumage of a fine velvet black; the bill and legs are black. It is the prettiest and smallest of all the Manakins, being not more than three inches and a half long, and not bigger than a Wren. It is found in Guiana, whence we received it; but it is very rare, and we are unacquainted with its habits. [A]

[A] Specific character of the Manacus Screna: — "It is black, its front white, its rump fea-green, its belly fulvous."

Besides the six species and their varieties, which we have now described, modern nomenclators; apply the name of Manakin to sour birds mentioned by Seba, and which we shall here notice, only to shew the errors into which such artificial classifications lead.

The first is thus described by Seba:-

Bird called Miacatotoll by the Brazilians \*. ..

"Its body is ornamented with blackish feathers, and its wings with feathers of turkeyblue; its head is blood-coloured, and has a golden-yellow collar round the neck and throat; the

<sup>\*</sup> This is the Pipra Torquata of Gmelin, the Manacus Torquatus of Brisson, and the Collared Manakin of Latham.

bill and legs are of a pale yellow." Brisson, who had not seen the bird, adds the dimensions and other details, which are furnished neither by Seba, nor by any other author. It is also strange that Seba should bestow the appellation of Miacatotots upon this bird, which he says was brought from Brazil; for that word is not in the language of that country, but is a Mexican word, and signifies the Maize-bird. But that Seba was mistaken in this application is evinced by the circumstance that Fernandez employs the same term in describing a Mexican bird which is very different. His words are these:—

## Of the Miacatototl, or Maize-bird.

It is pretty small; so called because it usually sits upon the shoots of maize; the belly is palish, and the rest of its body black, but with white seathers interspersed; its wings and tail are associated below. It frequents cool places, and is good eating." Seba has manifestly confounded therefore two different birds under the same name. But the description of Fernandez is as impersect as that of Seba, whose figure is still worse; so that it is impossible to decide the arrangement.

The same is the case with another bird mentioned by Seba, under the name of

Rubetra, or Crested American Bird \*.

This is the Pipra Rubetra of Linnæus and Gmelin, the Mana-

" It is not one of the smallest singing birds," fays he; "it has a yellow crest, its bill too is yellow, except the under-mandible, which is brown, the plumage round the neck, and on the body, is of a yellow rufous; the tail, and the great quills of the wings, are of a shining blue, while the fmall quills are pale-yellow.". From this description of Seba, Brisson has ventured to range this bird 'among the Manakins; but if he had inspected the figure, though it is a very bad one, he would have perceived the tail to be very long, the bill thin, curved, and elongated; characters quite different from those of the Manakins. I should therefore conclude, that this bird is still farther removed from the Manakins than the preceding.

A third bird which our nomenclators have reckoned a Manakin, is that mentioned by Seba under the name of

Picicitli, or The Least Crested Bird of Brazil\*.

"The body and wings are purple, which here and there is deeper; the crest is a most beautiful yellow, and formed by a small tust of feathers; its bill is pointed, and its tail red. In short, this little bird is very handsome, whatever view we take of it." From this confused description, Brisson concludes the bird to be a Manakin, and adds the dimensions and other

<sup>\*</sup> This is the Pipra Cristata of Linnaus and Gmelin, the Manucui Cristatus Ruber of Briston, and the Purple Manakin of Latham.

circumstances without citing his authorities; yet Seba tells us that its bill is pointed; and his figure is very imperfect. Besides, he is mistaken in asserting that it is a Brazilian bird, for the name *Picicitli* is Mexican; and Fernandez employs the same word to describe another bird which is certainly Mexican.

"The Picicilli is likewise a native of Tetz-coqua; it is very small, and its body wholly cinereous, except its head and neck, which are black, with white spots encircling the eyes (which are large), the front extending on the breast. These birds appear after rain. If they be raised in the house they soon die. They have no song. They are excellent food; but the Indians are uncertain where they breed."

It is eafy to see that there is no relation between this bird and that of Seba, who has very injudiciously occasioned a confusion of terms.

The same remark may be made with regard to the fourth bird described by Seba, under the name of

Coquantototl, or Small Crested Bird, Shaped like a Sparrow\*.

backwards. There is a yellow spot above the eyes; the stomach and belly are of a pale bluish yellow; the wings are of the same colour, and

<sup>\*</sup> This is the Pipra Grisea of Gmelin, the Manacus Cristatus Griseus of Brisson, and the Gray Manakin of Latham.

mixed with some slender carnation feathers, but the principal feathers are ash-gray; the rest of the body is gray; there is a small crest behind the head." From this indication Brisson has inferred that the bird is a Manakin; but the shape of the bill is alone sufficient to evince the contrary; and besides, since it is shaped like a Sparrow, its form must be different from that of the Manakins. It is evident, therefore, that this bird, whose name also is Mexican, is widely removed from the genus of the Manakins.—We shall not venture at present to assign the rank of the four birds, but wait till inquisitive travellers may have thrown light upon the subject.

## S P E C I E S RELATED TO THE MANAKIN.

## The WHITE PLUME.

Le Plumet Blanc.
Pipra Albifrons, var. Linn. and Gmel.
The White-faced Manakin, var. Lath.

THIS species is new. It is found in Guiana, but rare. M. de Manoncour presented a specimen to the king's cabinet. It is distinguished by a very long white creft, confifting of feathers about an inch in length, and which it erects at pleasure. It differs from the Manakins by its fize, being fix inches long; whereas the largest of the Manakins is only four inches and a half; the tail too is long and tapered, which in the Manakins is short and square; and the bill is much longer in proportion, and more hooked than that of the Manakins. Indeed, the only property in which it resembles the Manakins is, the arrangement of the toes; and but for this character it might be ranged with the Anteaters: we may regard it as forming the intermediate shade. We are unacquainted with its economy.

### The CINEREOUS BIRD or GUIANA.

Pipra Atricapilla, Gmel.

'The Black-crowned Manakin, Lath.'

This species is new. We shall only observe, that it ought not to be regarded as a true Manakin; for its tail is much longer, and tapered, and its bill is longer; but as it resembles the Manakins in the disposition of its toes, and in the figure of the bill, we ought to place it after them.

This bird is found in Guiana, but is not frequent. It was presented by M. De Manoncour to the King's cabinet.

### The PAPUAN MANAKIN, Lath.

Le Manikor\*, Buff.
Pipra Papuensis, Gmel.

This is a new species brought from New Guinea to the King's cabinet by Sonnerat. It differs from the Manakins, as the two middle quills of the tail are shorter than the lateral ones, and as it wants the scallop that occurs on the upper-mandible in all the Manakins: so that we ought to exclude it from the genus of the Manakins, especially as these birds, which are natives of America, are not probably found in New Guinea.

The

<sup>\*</sup> This name is contracted for Manakin Orangé, Buffon having taken it at first for a Manakin.

The upper-part of the body is black, with greenish reflections; the under-part of the body is of a dirty white; there is an oblong orange spot on the breast, which extends as far as the belly; the bill and legs are black. But Sonne-tat could give no information with respect to its manner of living.

## The COCK OF THE ROCK.

Le Coq de Roche, Buff.

Pipra-Rupicola, Linn. and Gmel.

Rupicola, Briff.

Upupa Americana Lutea, Ger. Orn.

Felsenbahn, Walch. Natur.

The Hoopoe Hen, Edw.

The Crested Manakin, Penn.

The Rock Manakin, Lath.

HOUGH this bird is of an uniform colour, it is one of the most beautiful of South America; for this colour is very beautiful, and its plumage nicely tapered. It feeds upon fruits, perhaps for want of feeds; fince it differs from the gallinaceous tribe by the shape of its toes only, which are connected by a membrane, the first and second as far as the third joint, and the fecond with the third no farther than the first joint. The tail is very short and square, as are fome coverts of the wings; feveral of these feathers have a fort of fringe on each fide, and the first great feather of each wing is scalloped from the tip to one third of its length: but what characterizes it the best is, a beautiful crest on the crown, longitudinal, and of a femicircular form. In the minute descriptions which Brisson and Vosmaër have given, this crest is imperfectly depicted; it is not fingle, but double, confifting of





THE ROCK MANAKIN.

of two inclined planes that meet at the vertex. In other respects their descriptions are accurate, except that they are applicable only to the male. The plumage of the male is of a fine red; that of the female is entirely brown, only there are some shades of rust-colour on the rump, the tail, and the feathers of the wings. The crest of the female is also double, but not so thick, so tall, so round, or so far protruded on the bill, as in the male. Both male and female are generally thicker and larger than the Ring-pigeon; but the different individuals probably vary in fize; for Brisson represents this bird of the bulk of a Roman-pigeon, and Volmaër afferts that it is rather smaller than the Common Pigeon. This difference might also be occasioned by the manner of stuffing the specimens; but in the natural state the female, though somewhat smaller than the male, is undoubtedly much larger than the Common Pigeon.

The male assumes not the fine red till he has attained some age; the first year he is only brown like the semale; but as he grows up, his plumage becomes marked with points and spots of rusous, which gradually deepen into red, though perhaps perfected before advanced age.

Though this bird must have attracted the notice of all who ever saw it, no traveller has described its habits and economy. Sonini de Manoncour is the first who has observed it with attention. It lodges not only in the deep clests

of the rocks, but even in the large dark caverns which totally exclude the folar rays; a circumstance that has induced many to believe it to be a nocturnal bird; whereas it flies and fees diftinctly in the day-time: however, it seems naturally to prefer gloomy recesses, since it is most frequent in caves which cannot be entered without the light of torches. We may therefore prefume, that their eyes are constructed like those of cats, and adapted both for the day and the night. The male and female are equally lively, and extremely wild. It is impossible to shoot them, unless the person be concealed behind a rock, where he must often wait several hours before an opportunity occurs; for the instant they perceive him, they escape to a distance by a flight which is rapid, though rather low and They feed upon small wild fruits, and usually scrape the ground, clap their wings, and shake themselves like the dunghill fowls; but they neither 'crow like the cock, nor cluck like the hen. Their cry relembles the found of the fyllable ké, pronounced with a shrill drawling tone.. They construct their nest rudely in the holes of rocks with small dry sticks; and commonly lay two white spherical eggs, which are of the fize of those of pigeons.

The males emerge oftener from their caverns than the females, which feldom appear, and probably do not quit their retreats except in the night. They can easily be tamed, and M. de Manoncour

Manoncour faw one at the Dutch-post on the river Maroni, which was allowed freely to live and run about with the poultry.

... They are found in great numbers on the mountain Luca, near Oyapoc, and on the mountain Courouaye, near the river Aprouack; and these are the only parts in this region of America whence we can expect to procure these They are much esteemed for the sake of their beautiful plumage, and are very scarce and dear; because the savages and negroes, whether from superstition or fear, will not venture into the dark caverns where they lodge. [A]

[A] Specific character of the Pipra Rupicola: - It has an erect " creft, with a purple margin; its body is faffron; the coverts of " its tail are truncated,"

## The PERUVIAN COCK OF THE ROCK.

Pipra Peruviana, Lath.

There is another species, or rather variety of the Cock of the Rock, which is found in the provinces of Peru: its tail is much longer than that of the preceding, and its feathers have not square ends; its wings are not fringed; instead of an uniform red, both wings and tail are black. and the rump cinereous; the crest also is different, being lower and confisting of detached feathers: in other respects, this Peruvian bird refembles the Guiana Cock of the Rock fo closely,

350 THE PERUVIAN COCK OF THE ROCK.

that we may regard it as a variety of the same species.

We might consider these birds as the reprefentatives of our dunghill poultry in the New-World; but I am told that, in the interior parts of Guiana and Mexico, there are wild fowls which bear still more analogy. These are indeed much smaller, being scarcely of the size of a Common Pigeon; they are generally brown and rufous; but they have the same shape, the fame little fleshy comb on the head, and the fame port as our ordinary fowl; their tail is also similar in shape and position, and the males have the crow of the Cock, though feebler. The savages who inhabit the remote tracts are perfectly well acquainted with these birds, but have never reduced them to the domestic state; nor is this in the least surprising, for they, have tamed none of the animals, which, might have proved useful, especially the Hoccos or Curassos, the Marails and the Agamis, among. the birds; and the Tapirs, the Pecaris, and the Agamis, among the quadrupeds. On the con+. trary, the ancient Mexicans, who were civilized, domesticated some animals, and particularly these: fmall brown fowls. Gemelli Carreri relates, that. they were called Chiacchialacca; and he subjoins,. that they were precifely like our common poultry, only, rather smaller, and their feathers brownish.

# The COTINGAS.

Pew birds have such beautiful plumage as the Cotingas; all those who have had an opportunity of seeing them, whether travellers or naturalists, seem to have been charmed, and speak of them with rapture. Nature has selected her choicest and her richest colours, and spread them with elegance and profusion: the painting glows with all the tints of blue, of violet; of red, of orange, of purple, of snow-white, and glossy black; sometimes these tints melt into each other by the sweetest gradations; at other times they are contrasted with wonderful taste: the various reslexions heighten and enliven the whole. The merit is intrinsic; it is expressive; it is inimitable.

All the species, or, if we chuse, all the branches of the brilliant samily of the Cotingas belong to the New Continent; and there is no soundation for what some have alleged, that they are sound in Senegal. They appear to delight in warm countries; they seldom occur south of Brazil, or roam north of Mexico: and consequently they would hardly traverse the immense stretch of ocean that separates the continents in those latitudes.

All that we know of their habits is, that they 'hever perform distant journies, but have only periodical flittings, which are confined within a narrow circle: they appear twice a-year in the plantations; and though they arrive nearly at the same time, they are never observed in flocks. They generally haunt the fides of creeks in fwampy ground \*, which has occasioned some. to call them water-fowls. They find among the aquatic plants abundance of infects, on which they feed, and particularly what are termed karias in America, and which, according to fome, are wood-lice; and according to others, a fort of ants. The creoles have, it is faid, more motives than one for hunting after these birds;—the beauty of the plumage, which pleases the eye; and, according to some, the delicacy of the flesh, which flatters the palate. But it is difficult to obtain both; for the plumage is often spoiled in attempting to skin the bird; and this is probably the reason why so many imperfect specimens are now brought from America. It is faid that they alight among the rice-crops and do considerable injury: if this be true, the creoles have still another reason for destroying them †.

• Mr. Edwards, who was unacquainted with the economy of the Cotingas, conjectured, from the structure of their feet, that they frequented marshes.

<sup>†</sup> The little which I have related of the habits of the Cotingas was communicated by M. Aublet: but I must add, that M. de Manoncour heard that the slesh of the Cotingas was much esteemed at Cayenne; perhaps this is true only of some species.



THE PURPLE-BREASTED CHATTERER .

The fize varies in the different species, from that of a small Pigeon to that of a Red-wing, or even under; in all of them the bill is broad at the base; the edges of the upper-mandible, and often those of the lower, are scalloped near the tip; the first phalanx of the outer-toe joined to that of the mid-toe; and, lastly, in most of them, the tail is a little forked or notched, and consists of twelve quills.

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## The BLUE RIBAND.

Le Cordon Bleu, Buff.

Ampelis-Cotinga, Linn. Gmel. and Briff.

The Purple-breafted Manakin \*, Penn. Edw. and Lath.

A bright blue is spread on the upper-part of the body, of the head, and of the neck, on the rump, the superior coverts of the tail, and the small coverts of the wings; the same colour appears also on the inferior coverts of the tail, the lower-belly, and the thighs. A sine violet purple covers the throat, the neck, the breast, and a part of the belly, as far as the thighs; and on this ground is traced, at the breast, a belt of the same blue with that of the back, and which has procured this bird the appellation of Blue Riband,

<sup>\*</sup> Called also the Thrush of Rio-Janeiro, and the Creoles term it Hen of the Woods.

or Knight of the Holy Ghost. Below the first belt there is in some subjects another of a beautiful red, besides many slame-spots on the neck and the belly: these spots are not disposed regularly, but scattered with that negligence in which nature seems to delight, and which art labours in vain to imitate.

All the quills of the tail and of the wings are black, but those of the tail, and the middle ones of the wings, are edged exteriorly with blue.

The specimen which I observed was brought from Brazil; its total length was eight inches; its bill ten lines; its alar extent thirteen inches; its tail two inches and two-thirds, composed of twelve quills, and projecting eighteen lines beyond the wings. The one described by Brisson was every way somewhat larger, and of the size. of a thrush.

The female has neither of these belts; nor has it the slame-spots on the belly and breast \*. In every other respect it resembles the male; the bill and legs of both are black, and the ground-colour of their feathers is blackish, and that of the purple feathers white; and the tarfus is covered behind with a fort of down. [A]

<sup>\* &</sup>quot;At Cayenne there are two other (Blue-Riband Thrushes), fays Salerne, "which resemble this exactly, except that the one wants these spots, and the other the Blue-Riband."

<sup>[</sup>A] Specific character of the Ampelis-Cotinga:—" It is of a very bright blue, below purple, its wings and tail black."

M

### The PURPLE THROATED CHATTERER.

Le Quereiva, Buff. Ampelis Cavana, Linn. and Gmel. Cotinga Coyanenfis, Briff. Lanius Ococolin, Klein and Seba.

The greatest portion of each of its feathers, reckoning from their infertion, is black; but as the tips are beryl, this is really the predominant colour of the plumage. In some parts of the upper furface of the body the dark hue strikes through the coverts, but then it forms only small specks; and it is totally concealed by the blue in the under-furface of the body: only, in some specimens, there are, near the rump and the thighs, a few small feathers, which are partly black, and partly purple-red.

The throat and a part of the neck are covered with a broad fpot of a very bright violet-purple, which in different subjects varies in extent. coverts of the wings, their quills, and those of the tail, are almost all black, edged or tipt with beryl; the bill and legs are black.

This bird is found in Cayenne; it is of the fize of the Red-wing, and fashioned like the preceding, except that the wings, when closed, reach not the middle of the tail, which is rather longer. [A]

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<sup>[</sup>A] Specific character of the Ampelis Cayana: - " It is bright " blue; its neck violet below."

#### The BLUE-BREASTED CHATTERER.

La Terfine, Buff.
Ampelis Terfa, Linn. and Gmel.

Linnæus is the first, and even the only one, who has hitherto described this bird: the head, the. top of the neck, the quills of the wings and of the tail, are black; the throat, the breast, the lowerpart of the back, the outer edge of the quills of the wings, light blue: there is a transverse bar of light blue on the superior coverts of the same quills; the belly is yellowish-white, and the sides are of a deeper cast. Linnæus does not inform us from what country it is brought; but it is probable that it is a native of America, like the other Cotingas. I should be even tempted to regard it as a variety of the preceding, fince blue and black are the prevailing colours of the upper-part of the body, and the colours of the under-part are dilute, as usual in the females, the young birds, &c. A fight of the fubject would be necessary to decide the question. [A]

M

<sup>[</sup>A] Specific character of the Ampelis Terfa:—"It is bright blue, its back black, its belly yellowish-white."

#### The SILKY CHATTERER.

Le Cotinga à Plumes Scyeuses, Buff. Ampelis Maynana, Linn. and Gmel. Cotinga Mayanensis, Briss.

Almost all the feathers in the body of this bird, and the coverts of the wings and of the tail are unwebbed, and parted into filaments; so that they resemble filky briftles more than real feathers; a property which is sufficient to diftinguish it from all the other Cotingas. The general colour of its plumage is bright blue, varying into a fine fky-blue, as in the preceding; but we must except the throat, which is deep violet, and the quills of the tail and of the wings, which are blackish; most of these are edged exteriorly with blue; the feathers of the head and of the upper-part of the neck are long and narrow, and the ground-colour is brown; that of the feathers of the body and breast, &c. confists of two colours; at the infertion of these feathers it is white, and then purple-violet, which in some parts strikes through the blue of the incumbent feathers; the bill is blue, and the legs are black.

Total length seven inches and one-third; the bill nine or ten lines; the tarsus the same; the alar extent thirteen inches and one-third; the tail about three inches, consisting of twelve quills, and exceeds the wings by an inch. [A]

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<sup>[</sup>A] Specific character of the Ampelis Maynana:—" It is bright blue, its throat violet."

#### The POMPADOUR CHATTERER.

Le Pacapac, ou Pompadour, Buff.

Ampelis-Pompadora, Linn. Gmel. and Borowsk.

Cotinga Purpurea, Briss.

Turdus Puniccus, Pall.

All the plumage of this beautiful bird is bright gloffy-purple, except the quills of its wings, which are whitish tipt with brown; and the inferior coverts of the wings, which are entirely white: the under-side of the tail is of a lighter purple; the ground of the feathers onevery part of the body is white; the legs are blackish; the bill gray-brown, and on each side of its base rises a small whitish streak, which, passing under the eyes, bounds the face.

The great coverts of the wings are oddly fashioned, long, narrow, stiff, pointed, and spoutshaped; their vanes parted, their shaft white, and without webs at its tip, which resembles in Some degree the appendices that terminate the wing in the Common Chatterer (Jaseur), and is nothing but the projection of the shaft beyond the webs. This is not the only point of refemblance between these two species; in the shape of their bill, their fize, the proportional dimensions of their tail, their feet, &c ; but their instincts are very different, since the common Chatterer prefers the mountains, and all the species of Cotingas frequent the low marshy grounds. Total

Total length seven inches and a half; the bill ten or eleven lines; the tarfus nine or ten lines; the alar extent above fourteen inches; the tail two inches and a half, confifting of. twelve quills, and projecting from fix to eight. lines beyond the wings.

The Pompadour is migratory; it appears in Guiana near the inhabited fpots in March and September, when the fruits on which they feed are ripe; they lodge among the large trees on the banks of rivers, and neftle on the highest branches, but never retire into the wide forests.—The specimen from which this description was made came from Cayenne, [A]

[A] Specific character of the Ampelis Pompadora: - " It is " purple; the nearest coverts of its wings are sword-shaped, elon-" gated, boat-shaped, and stiff."

M

## VARIETIES of the POMPADOUR.

Pacapac Gris-Pourpre, Buff.

I. The 'GREY-PURPLE POMPADOUR. It is rather fmaller than the preceding, but its proportions are exactly the fame; the great coverts of its wings have the same singular conformation, and it inhabits the same country. So many common properties leave no room to doubt, that, though the plumage be different,

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#### 360 VARIETIES OF THE POMPADOUR.

these two birds belong to the same species; and since the present is smaller, I should be apt to suppose it to be a young one that has not acquired its sull growth, or the finished colours of its plumage: all that was purple in the preceding is, in the present, variegated with purple and cinereous; the under-side of the tail is rose-coloured; the quills of the tail are brown: what appears of those of the wings are also brown; the interior and concealed part of their shaft is white from its insertion to two-thirds of its length; and also the middle ones are edged exteriorly with white.

II. M. Daubenton the younger and myself haveseen, at Mauduit's, a Gray Cotinga, which appeared to belong to the species of the Pompadour, and to be only younger than the preceding, but which ought not to be confounded with another which is also called the Gray Cotinga, and which I shall presently describe under the name of Guirarou\*.

It is probable that these are not the only varieties which exist of this species, and that others will be found among the semales of different ages.

<sup>\*</sup> M. de Manoncour has verified our conjectures on the spot-In his last voyage to Cayenne, he found that the Purple-gray Cotinga is the young bird, and that it takes at least eighteen months to acquire its full colour.

## The RED CHATTERER,

L'Ouette, ou Cotinga Rouge de Cayenne, Buff. Ampelis-Carnifex, Gmel. Lanius Ruber Surinamensis, Ger. Itterus Totus Ruber, Klein. Cotinga Rubra, Briss. Red Bird from Surinam, Edw.

The prevailing colour of its plumage is red, but diverlified by various tints, which it assumes in different parts; the most vivid, which is scarlet, is spread over the upper-part of the head, and forms a fort of crown or cap, of which the feathers are pretty long, and are conjectured by Edwards to rise like a crest: the same scarlet covers the lower-part of the belly, the thighs, the lower-part of the back, and almost to the end of the tail-quills, which are tipt with black: the fides of the head, the neck, the back, and the wings are shaded with deep tints, which change the red into a fine foft crimfon; but the darkest cast is a fort of border which surrounds the scarlet cap, and this is a little more dilute behind the neck and on the back, and more fo on the throat and breast; the coverts of the wings are edged with brown, and the great quills become more and more obscure, and terminate almost in black; the bill is a dull red; the legs dirty yellow; and, what is remarkable, the tarfus is covered with a fort of down as far as the origin of the toes. The

#### 362 THE RED CHATTERER.

The Red Cotinga migrates, or rather flits, like the Pompadour, only it is more common in the interior parts of Guiana.

Total length about feven inches; the bill nine lines; the legs feven lines; the tail two inches and a half, and projects twenty lines beyond the wings, and confequently the alar extent is less than in the preceding species. [A]

[A] Specific character of the Ampelis Carnifex: — "It is red; "the stripe at its eyes, and the tips of the quills of the wings "and of the tail, are black."

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#### The CARUNCULATED CHATTERER.

Le Guira Panga, ou Cotinga Blanc, Buff.'
Ampelis Carunculata, Gmel.
Cotinga Alba, Briff.

Laët is the only person who has mentioned this bird, and all that he says amounts to no more than that its plumage is white and its cry very loud. Since his time, the species has been in a manner lost, even in Cayenne; and M. de Manoncour has the merit of re-discovering it.

Both the male and the female are figured in the *Planches Enlumineés*. They were perched upon trees beside a swamp when they were killed; they were betrayed by their cry, which, as Läet \* observed, was very loud; and it refembled the sound of the two syllables in an, uttered with an exceedingly drawling tone.

The most remarkable character of these birds is, a sort of caruncle under the bill as in the turkies, but differently organized: it is flaccid and pendulous when the bird is composed at rest; but when the passions are rouzed, it swells in every dimension, and, in this state of tension, is more than two inches long, and three or four lines in circumference at the base: this effect is produced by air, which is driven through an aperture of the palate into the cavity of the caruncle and inflates it.

This caruncle differs from that of the turkey also in another circumstance; it is covered with small white feathers; and besides, it is not peculiar to the male. The plumage of the semale is however entirely different: for in the male the bill and legs are black, all the rest of a pure spotless white, except some tints of yellow on the rump, and on some of the quills of the tail and of the wings: but in the semale the colour is not so uniform; the upper-part of the head and body, the superior coverts of the wings, and most of the quills of the wings and of the tail, are olive mixed with gray; the la-

<sup>\*</sup> Voyagers say, that its voice resembles the sound of a bell, and may be heard at the distance of half-a-league. Hist. Gen. des Voyages, tom. xiv. p. 299.

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teral quills of the tail gray, edged with yellow; the cheeks and forehead white; the feathers of the throat gray, edged with olive; those of the breast and of the anterior part of the belly gray, edged with olive and tipt with yellow, and the coverts of the lower surface of the tail lemonyellow; the inferior coverts of the wings white, edged with the same yellow.

The male and female are nearly of the same fize. Total length twelve inches; length of the bill eighteen lines; its breadth at its base seven lines: length of the tail three inches nine lines, consisting of twelve equal quills, and projecting twenty-one lines beyond the wings. [A]

[A] Specific character of the Ampelis Carunculata:—" It has a pendulous, expansible, and moveable caruncle at the base of the bill."

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#### The VARIEGATED CHATTERER.

L'Awerano, Buff. Ampelis Variegata, Gmel. Cotinga Nævia, Briff. Guira-Punga, Ray and Will.

The head is deep brown; the quills of the wings blackish; their small coverts black; the great coverts blackish, with some mixture of brownish green: all the rest of the plumage is cinereous, mixed with blackish, chiefly on the back, and with greenish on the rump and tail.

The

The bill is broad at the base, as in the Cotingas; its tongue is short; its nostrils uncovered; its iris bluish-black; its bill black; its legs blackish. It has several black sleshy appendices under the neck, nearly of a lance-shape, which marks a slight affinity to the preceding at the same time that it discriminates it from all the other Cotingas.

The Variegated Cotinga is as large as a Pigeon; the length of its bill, which is an inch, equals the greatest breadth; its legs are twelve or thirteen lines; its tail is three inches, and is almost wholly beyond the reach of the wings.

The female is rather smaller than the male, and has not the sleshy appendices under the neck; it resembles the Fieldsare in shape and size; its plumage is a mixture of blackish, of brown, and light green; but these colours are distributed so, that the brown predominates on the back, and the light-green on the throat, the breast, and the under-part of the body.

These birds grow plump and juicy. The male has a very strong voice, and inslected in two different ways; sometimes it resembles the noise occasioned by striking a cutting instrument against a wedge of iron (kock, kick); and sometimes it is like the jarring of a bell that is cracked (kur, kur, kur). It is heard in no part of the year but during the six weeks of the middle of summer; that is, in the southern hemisphere, in December and January; and hence the Portuguese

## . 366 THE VARIEGATED CHATTERER.

guese name, Ave de Verano, i. e. Bird of Summer. It is remarked that its breast is marked exteriorly with a surrow which runs through its whole length; and also that its wind-pipe is very wide, which perhaps contributes to the strength of its voice. [A]

[A] Specific character of the Ampelis Variegata:—" It is cine" reons; to its throat are attached two lance-shaped caruncles."

M

# The GUIRAROU, Buff.

Lanius-Nengeta, Linn. and Gmel. Cotinga Cinerea, Briss.
The Gray Pyc of Brazil, Edw.
The Gray Shrike, Penn. and Lath.

teristic feature of the Cotingas, this bird, and that of the preceding article, would be regarded as degenerate branches of the original stock. The Guirarou has nothing remarkable either in its colours, or in their distribution, if we except a black bar below the eyes, and the tint of the iris, which is sapphire: a uniform light gray is spread over the head, the neck, the breast, and all the under-part of the body; the thighs, and the upper-part of the body, cincreous; the quills, and coverts of the wings, blackish; the quills of the tail black, tipt with white, and its superior coverts white; lastly, the bill and legs are black.

The flat shape, and the shortness of the bill, the loudness of its voice, which is somewhat like that of the Blackbird, but shriller, and its haunting the margin of water, are the chief circumstances in which the Guirarou resembles the Cotingas; its size is also nearly the same, and it inhabits the same climates: yet Willughby has referred it to the White-ears; and other excellent ornithologists have reckoned it a Fly-catcher.

For my own part, I shall not venture to assign its genus; I shall retain the name which it bears in its native climate, and wait for fuller observations made on feveral living subjects, which will point out its proper arrangement. The Guirarous are very common in the interior parts of Guiana, but are not found at all in Cayenne; they ramble little; many occur generally in the same district; they perch generally on the lowest branches of certain large trees, where they pick up feeds and infects, on which they fublist. From time to time, they cry all at once, allowing an -interval between each found; this cry, though harsh in itself, is cheering music to travellers who have lost their way in the immense forests of Guiana, for it directs them to the banks of à river.

The subject observed by M. De Manoncour was nine inches and a half total length; its bill twelve inches long, seven broad, sive thick at the base, and encirled with hairs; the tail was square, four inches long, and exceeded the wings by two inches and a half; the tarsus was an inch, and so was the bill \*.

<sup>\*</sup> I owe these details to M. de Manoncour.

### VARIETY of the GUIRAROU.

I know of one only; it is what we have called the Gray Cotinga; and Daubenton and myself suspect that it is a variety of age, because it is smaller, its total length being seven inches and a half, and its tail rather shorter, the wings reaching to the middle, and all the other differences result from defect. It has neither the black bar under the eyes, nor the white-bordered tail, nor the white superior coverts; the quills of the wings are edged with white, but they are not so blackish; and those of the tail not so black as in the Guirarou. [A]

[A] Specific character of the Lanius-Nengeta: — "Its tail "wedge-shaped, with a white tip; its body is cinereous; below, "white."

M

## The ANTERS.

Les. Fourmiliers, Buff.

South America, the swarms of insects and loathsome reptiles seem to predominate over all the rest of the animal creation. In Guiana and Brazil\* the ants are so assonishingly multiplied, that their hills are some fathoms wide, and several feet in height, and proportionally populous as those of Europe, of which the largest are only two or three feet in diameter; so that they may be computed to contain two or three hundred times the number of ants. Yet they exceed still more in number; and in the wildernesses of Guiana, they are an hundred times more frequent than in any part of the ancient continent,

'. \* This is also the case in many other parts of America. relates, that in Brazil, and even in the wet grounds of Peru, the quantity of ants is so enormous, that they devour all the feeds which are committed to the earth; and though fire and water be employed • to extirpate them, the attempts have hitherto failed of success. He adds, that it were much to be wished that Nature had ordained in those countries many species of animals like the Ant-eaters. (Myrmecophage, Linn.); which might bore into the hillocks, and extract These insects with their long tongue. Some of the ants are not larger than those of Europe; others are twice or thrice as large. They raise hills as large as hay-stacks; and their number is so vast, that they make tracks feveral feet broad in the fields, and in the -woods, and often through an extent of many leagues. - Fernandez fays also that these auts are larger, and pretty much like our wingedants, and that their hills are of an incredible height and width-200. ~

But (such is the system of Nature!) every creature is the destined prey of another; and generation and destruction are ever conjoined. We have in the former work given an account of the Tamanoir, of the Tamandua, and of the other quadrupeds which seed upon ants; we are now to write the history of a kind of birds which live also upon these insects.—We were unacquainted with the existence of the Anters till M. de Manoncour presented the specimens to the King's cabinet.

The Anters are natives of Guiana, and are analogous to none of the European birds; but in the shape of their body, of their bill, of theirfeet, and of their tails, they bear a great refemblance to the short-tailed Thrushes (Breves). which our nomenclators have improperly confounded with the Blackbirds: but as the shorttailed Thrushes inhabit the Philippines, the Moluccas, the island of Ceylon, Bengal, and Madagafcar, it is more than probable that they are not of the same race with the Anters of America. These appear indeed to constitute a new genus, for which we are wholly indebted to. M. de Manoncour, whom I have so often cited for his extensive knowledge of foreign birds: he has presented above an hundred and fixty different species to the Royal cabinet; and has also been so obliging as to communicate to me all the observations which he made in his voyages to Senegal and America. I have on many

occasions availed myself of this information; and in particular I have formed entirely from it the history of the Anters.

In French Guiana, and indeed in all countries where natural history is little known, names are applied to animals from the slightest analogies. This has been the case with the Anters: they were observed to perch seldom, and run like Partridges; but as they were inferior to these birds in size, they were distinguished at Cayenne by the appellation of Little Partridges.

. But these birds are neither Partridges, nor Blackbirds, nor thort-tailed Thrushes; only they resemble the last in their chief external charac-· ters. 'Their legs, are long; their tail and wings fhort; the nail of the hind-toe more hooked, and longer than those of the fore-toes; the bill ftrait and lengthened; the upper-mandible scalloped at its extremity, which bends at the junction of the lower mandible, and projects about a line beyond it; but their tongue is short, and beset at the tip with small cartilaginous and fleshy threads. Their colours are also very different; and it is very probable that their instincts are dissimilar, since they inhabit widely distant climates. When we described the shorttailed Thrushes, we were unable to give any account of their natural habits, fince no travellers had taken notice of them, and therefore we cannot draw any comparison with those of the American Anters.

In general the Anters keep in flocks, and feed upon small insects, and chiefly ants, which are for the most part similar to those of Europe: They are almost always found upon the anthills, which in the interior tracts of Guiana, are more than twenty feet in diameter, and whose infect nations retard the extension of cultivation, and even confume the provisions of life.

There are several species of Anters, which; though very different in appearance, often affociate together; the large ones and the fmall, the long-tailed and the short-tailed, are found on the fame fpot. Indeed, if we except the principal kind, which are very few, it is rare to find in the rest two subjects perfectly alike; and we ' may suppose that this diversity arises from the intermixture of the small ones: so that we must regard them as mere varieties, and not distinct fpecies.

In all these birds the wings and tail are very short, and therefore ill calculated for flying; accordingly they only trip along the ground, and hop among the low branches; and though lively and active, they never shoot through the. air. '"

· The voice of the Anters is various in the different species, and in some it is very singular.

As infects are the chief food of these birds. they feek the folitary tracts where those are not molested by the intrusion of man, and swarm in abundance. They live in the thickest and the remotest.

B B 3

remotest forests, and never visit the savannas, the cleared grounds, and still less the neighbourhood of plantations. They employ dry herbs carelessly interwoven in the construction of their nests, which are hemispherical, and two, three, or four inches in diameter, and suspend them by the two sides on the bushes, two or three feet from the ground. They lay three or four eggs, which are almost round.

The flesh of most of these birds is unpalatable food, and has an oily rank taste, and when opened, the digested mass of ants, and of other insects they swallow, exhales a putrid offensive smell.

# The KING OF THE ANTERS.

Le Roi des Fourmiliers, Buff. Turdus Rex, Gmel. Turdus Grai. rius, Lath. Ind. The King Thrish, Lath. Syn.

### First Species: 1

This is the largest and the most unfrequent of all the birds of this genus. It is never seen in slocks, and seldom in pairs; and as it is generally alone among the others, and is larger than them, it is called The King of the Anter's. "It is the more entitled to that appellation, as it affects an uncommon distance to other birds, and even to those of its own kind. If so excellent an obferver as M. de Manoncour had not communicated the details of its manner of living, to different

cover it to be an Anter, from the mere inspection; would have been almost impossible; for its bill is thicker, and differently shaped from that of all the others. This bird is generally on the ground, and is far from being so lively as the rest, who hop around it. It frequents the same. spots, and feeds also upon infects, especially ants. The female, as in all the other species of this genus, is larger than the male,

. Its length from the point of the bill to the end of the tail is seven inches and a half; its bill, is brown, fomewhat hooked, fourteen lines long, and five lines thick at the base, which is befet with small whiskers; the wings extend the whole length of the tail, which is only fourteen' lines; the legs are brown, and two inches long.

The under-fide of the body is variegated with brown rufous, blackish, and white; the rufous brown is the predominant colour as far as the. belly, where it grows dilute, and the whitish prevails. Two white bars descend from the corners of the bill along with the dusky shade of the throat and neck; on the breast is a white spot nearly triangular. The upper-fide of the body is brown rufous, shaded with black and white, except on the rump and tail, where the colour is uniform.—The fize and the tints are subject to 'vary in different specimens, and we have only described here the more usual appearances.

<sup>[</sup>A] Specific character of the Turdus Rex: -- " Its plumage con-" fists of brown and rufous; below more dijute; the back or its \* head lead-coloured; its front varingated with white and brown.

#### The AZURIAN.

Turdus Cyanurus, Ginel. The Blue-tailed Thrush, Lath.

### Second Species.

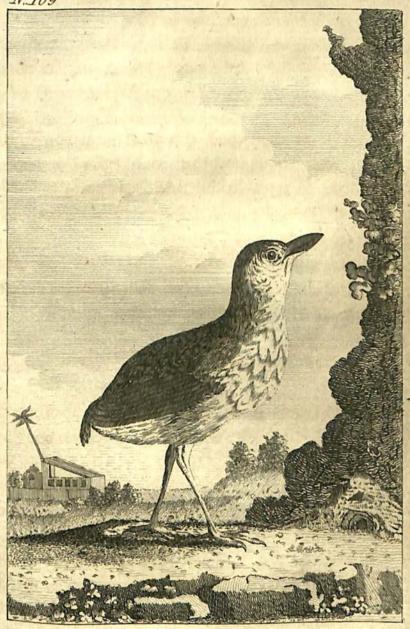
We have described this bird after the Black-birds, and have nothing to add to the former account. We remarked that it was undoubtedly not a Blackbird; and from its external appearance it ought to be ranged among the Anters. We are unacquainted with its economy. It is rare in Guiana, but was sent however from thence to M. Mauduit.

## The GREAT BELFRY.

Le Grand Béfroi, Buff. Turdus Tinniens, Gmel. The Alarum Thrush, Lath.

#### Third Species.

We apply the epithet of *Great* only to diftinguish it from another smaller species; for its total length exceeds not six inches and a half; its tail is sixteen lines, and projects six lines beyond the wings; its bill is eleven lines, black above and white below, and three lines and a half broad at the base; the legs are eighteen lines



THE ALARUM THRUSH.

lines long, and, as well as the toes, are of a light lead-colour.

The tints vary in almost each individual, and the dimensions are also variable \*;—we have stated the average.

In this species the females are much larger than the males, and still more disproportioned than in the first species: in this respect the Anters resemble the birds of prey.

. What most remarkably distinguishes this bird, which we have named Belfry, is, the fingular found that it makes in the evenings and mornings: this refembles the din of an alarum-bell. Its voice is fo strong, that it can be heard at a great distance, and one would hardly suppose it emitted by so small a bird. The succession of founds, which is as rapid as the quick strokes. of a bell, continues about an hour. It appears to be a fort of call fimilar to that of the Partridges, only it is heard at all feafons, and every day, at the rifing of the fun, and before his fetting: however, as the period of love is not fixed in those hot climates, the Partridges, as well as the Anters, have their call in every feafon indifcriminately.

The King of the Anters and the Belfry are the only birds of the genus that are palatable food. [A]

<sup>\*</sup> In some individuals, the upper-mandible, though scalloped and a little hooked, exceeds not the under.

<sup>[</sup>A] Specific character of the Turdus Tinniens:—" It is brown' above, white below, its breast spotted with black, its tail' se equal."

## The SMALL BELFRY.

Le Petit Béfroi, Bust. Turdus Lineatus, Ginel. The Speckled Thrush, Lath.

#### VARIETY.

Its length five inches and a half; the upperpart of the body is olive, which grows more dilute on the rump; the tail, of which the quills are brown, as well as those of the wings, exceeds these by ten lines; the under-part of the throat is white, and the feathers below become gray, and spotted with rusty brown as far as the belly, which is entirely rusty brown.

From this description it is easy to perceive the striking resemblance of colours between this bird and the Great Belfry, and the figure is precisely the same.

# The PALIKOUR, or ANTER, properly so called.

Turdus Formici vorus, Gmel. The Ant Thrush, Lath.

#### Fourth Species.

It is near fix inches long; its body not fo thick as that of the Little Belfry, and its bill longer than in that species; its iris reddish, and its eyes encircled by a skin of sky-blue; the legs and the lower mandible of the same colour.

The throat, the fore-part of the neck, and the top of the breast, are covered with a cravat of black, with a black and white border, which extends behind the neck and forms a half-collar; the rest, of the under-part of the body is cinereous.

The birds of this species are very lively, but fly not more than the others in open air; they climb among the bushes like magpies, expanding the feathers of their tail.

They make a fort of quavering, interrupted by a feeble cry, which is abrupt and shrill.

Their eggs are brown, and nearly as large as those of sparrows; the great end is sprinkled with spots of a deep brown; the nest is thicker and closer interwoven than those of the other Anters, and is covered externally with more than one layer of moss.

The

## The C O L M A, Buff.

Turdus Colma, Gmel. 1
The Rufous-naped Thrush, Lath.

The Colma may likewise be considered as a variety of the preceding, or as a closely-related species: all the plumage of its body is brown; below it is brown-gray, and on the belly cinereous; only on the lower-part of the head, behind the neck, there is a fort of rusous half-collar, and the throat is white, dotted with brown-gray. We have formed its name Colma, from this last character. In some subjects the rusous half-collar is wanting.

## The TETE MA, Buff.

Turdus Colma, Variety.

This is a native of Cayenne, and seems to resemble much the preceding, not only in size, which is the same, and in shape, which is nearly similar, but in the disposition of the colours, which are almost the same on all the upper-part of the body. The greatest difference occurs on the throat, the breast, and the belly, which are blackish brown: whereas in the Colma, the origin of the neck and throat are white, variegated

gated with small brown spots, and the breast and belly are ash-gray, which would induce us to suppose that the differences are only sexual. In that case I should reckon the Tétéma as the male; and the Colma as the semale, because its colours are generally more dilute.

#### The CRESTED ANTER.

Le Fourmilier Huppé, Buff. Turdus Cirrbatus, Gmel. The Black-crested Thrush, Lath.

#### Fifth Species.

The average length of this bird is near fix inches: the upper-part of the head is decorated with long black feathers, which it can erect at pleasure like a crest; the iris is black, the underpart of the throat is covered with black and white feathers; the breast and the under-part of the neck are black;—all the rest of the body is ash-gray.

The tail is two inches four lines in length, and confilts of twelve tapered quills \*, edged and tipt with white, and exceeds the wings an inch, whose superior coverts are tipt with white, and, in some subjects, they are of the general colour. of the body, or ash-gray.

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<sup>\*</sup> In all the species of the Anters, the tail is more or less tapered; those which have it larger than the rest, have it also thinner, and the quills weaker.

The female has also a crest, or rather the same long feathers on the head, but they are rusous, and its plumage differs from that of the male in nothing except a slight shade of rusty upon the gray.

These birds have a cluck like that of a pullet; they lay three eggs \*, and breed several times annually.

\* M. de Manoncour found in the month of December feveral young of this species ready to fly. He tried in vain to rear some of them; for they all died in the space of sour days, though they are very heartily crumbs of bread.

## . The WHITE-EARED ANTER.

Turdus Auritus; Gmel.
Pipra Leucotis, Gmel.
The White-earcd Manakin, Lath.
The White-eared Thrush, Lath.

#### Sixth Species.

It is four inches nine lines in length; the upper-part of the head is brown, and the lower fides of the fore-part of the head and throat, are black: a small bar of shining white stretches from the posterior angle of the eye to below the head, where the feathers are broader and longer than those of the head.

There is nothing remarkable in the rest of the plumage: the colour of the upper-part of the body is an unpleasant mixture of olive and rusty. The superior part of the under-sides of the body is rusous, and the rest gray.

The tail is fifteen lines in length; the wings extend its whole length; the legs are brown: the habits of the bird are the same as those of the preceding kinds.

#### The CHIMER.

La Carrillouneur, Buff.
Turdus Tintinnabullatus, Gmel.
Turdus Campanella, Lath. Ind.
The Chiming Thrush, Lath. Syn.

#### Seventh Species.

The total length of this bird is four inches and a half, and its tail projects nine lines beyond the wings.

Besides the habits common to the Anters, the Chimer has others peculiar to itself: it haunts the grounds where the ants abound, but does not intermingle with the rest; it generally forms small separate parties of four or six: they hop about and utter a very singular cry, exactly like the chime of three different-toned bells: their voice is sonorous, considering the smallness of their size. We might suppose that they sing their parts, though it is likely that each sounds successively the three notes; but we are not certain, as no person has ever been at the trouble to domesticate

mesticate them. Their voice is not so loud as that of the Great Belfry, which is indeed equal to that of a bell of considerable size; and the Chimers are not distinctly audible farther than sifty paces, while the Belfry may be heard at the distance of half a league. These birds continue their chiming without intermission for whole hours.

The species is very rare, and found only in the still forests, in the heart of Guiana, [A]

[A] Specific character of the Chimer, Turdus Tintinnabulatus?

"Its crown and temples white, fpotted with black, its eyebrows black, its chin white, its breast carnation, spotted with
black; its back, its wings, and its tail, brown; its rump, its
belly, and vent, orange-rusous."

## The B A M B L A.

Turdus-Bambla, Gmel. The Black-winged Thrush, Lath.

### Eighth Species.

We have given it this name, because there is a white transverse bar on each wing (bande-blanche). The habits of the bird are unknown; but from its resemblance to the other Anters, I should infer that it belongs to the same genus, though still a distinct species.

Besides these eight species of Anters, we have seen three others which were brought from Cayenne, Cayenne, but without the least account of their natural habits. [A]

[A] Specific character of the Turdus Bambla: it is spotted, above it is dusky-rusous, below cinereous, its wings black, and that a transverse white stripe."

## The A R A D A, Buff.

· Turdus Cantans, Gmel.
The Musician Thrush, Lath.

This was called by M. de Manoncour, the Musician of Cayenne; I rather chuse to retain the name of Arada, which it receives in its native country.

It is not exactly an Anter; but we have placed it after these, because it has the same external characters, though it differs in its ha-It perches upon trees, and never alights on the ground, except to pick up ants and other infects, upon which it feeds. It is distinguished from them by a remarkable property; for all the Anters utter harsh cries without any molestation, while the Arada has the most charming warble. It commences often with the seven notes of the octave, and then whiftles different foft varied airs, which are lower than those of the Night- ingale, and more like the breathing of a fweet toned flute; and it is faid to excel even that celebrated chorifter of the grove in delicate tender melody. VOL. IV. CC

melody. It has also a fort of whistle, resembling that by which a person calls upon another: travellers frequently mistake this sound, and, by following it, they are led more astray; for as they approach, the bird continually recedes, and whistles at intervals.

The Arada avoids fettled spots; it lives alone in the depth of the vast forests, and the softness of its melody seems in some measure to relieve the gloomy stillness around. It is one of the very sew birds in the New World which Nature has distinguished by the charms of its song. But the species is not numerous; and the traveller may frequently pursue his pathless journey without meeting a single Arada to sooth his sympathetic gloom.

The colours of its plumage correspond not with the richness of its song; they are dull and obscure.—The total length is four inches, and the 'tail is radiated transversely with rusous, brown, and blackish;—it exceeds the wings by seven lines.

To the Arada we may refer a bird which - Mauduit shewed to us: it resembles that in the length and shape of its bill, the form of its tail, the length of its legs, in having some white feathers mixed with the brown ones on the sides of the neck; the size is nearly equal, and the shape similar; but the tip of its bill is more hooked, its throat is white, with a half-dollar of black below, and its plumage is uniform, and

And not striped with brown lines, as in the Arada, whose throat and under-part of its neck are red. We may presume therefore, that this bird is either a distinct variety of the Arada, or a contiguous species, since it inhabits Cayenne; though, being unacquainted with its habits, we shall not at present presume to decide the matter. [A].

[A] Specific character of the Turdus Cantans: — " It is brown-rufons, variegated with blackish transverse streaks, below partly white; its chin, its cheeks, and its throat, orange-rufous; a black space spotted with white on each side of the neck."

#### The NIGHTINGALE ANTERS.

Les Fourmiliers Roffignols, Buff.

In their external figure these birds are intermediate between the Anters, and the Nightinagales: their bill and seet are like those of the Anters, and their long tail resembles that of the Nightingale's. They live in slocks in the vast forests of Guiana; they run upon the ground and hop among the low branches, but fly not in open air; they feed upon ants and other small insects; they are very nimble, and when they frisk about, they make a fort of quavering; succeeded by a feeble shrill cry, which they repeat several times when they call upon each other.

We know only two species .: -

## The CORAYA, Buff.

Turdus Còraya, Gmel. The Barred-tail Thrujh Lati

First Species.

We have given it this name, because its tail is radiated transversely with blackish (queue-rayée). The length is five inches and a half, from the point of the bill to the end of the tail; the throat and the fore-part of the neck are white; the breast is less white, and receives a cinereous shade; there is a little of rusty under the belly and on the thighs; the head is black and the upper-part of the body rusous-brown; the tail is tapered, and two inches long, and extends at least eighteen lines, beyond the wings; the hind nail is, as in the Anters, the longest and strongest of all.;

## The ALAPI, Buff.

Turdus Alapi, Gmel. The Black-headed Thrush, Lath.

## Second Species.

It is rather larger than the preceding, being fix inches long: its throat, the fore-part of its neck and breast are black; the rest of the underpart of the body cinereous; an olive-brown is spread

fpread over the upper-part of the head, neck, and back; the rest of the upper-part of the body is deeper cinereous than that of the belly: there is a white spot on the middle of the back; the tail is blackish and somewhat tapered, projecting one inch and a half beyond the wings, the quills of which are brown above and below, and the superior coverts are of a very deep brown, dotted with white, whence its name Alapi (ailes . Piquetées).

The female has not the white spot on the back; its throat is white, and the rest of the under-part of the body rusty, with ash-gray, feathers on the sides of the lower-belly, and on what form the inferior coverts of the tail; the points of the coverts of the wings are also rusty, and that of the upper-part of the body is not so deep as in the male.

There shades, and even the colours themfelves, vary in different subjects, as we have had occasion to observe with regard to the Anters.

# The A G A M I, Buff.

. Pfophia Crepitans, Linn. Gmel. and Priow's
. Grus Pfophia, Pall.
Phafianus Antillarum, Briss.
L'Oifeau Trompette, Descr. Surin.
The Gold-breafted Trumpeter, Lath.

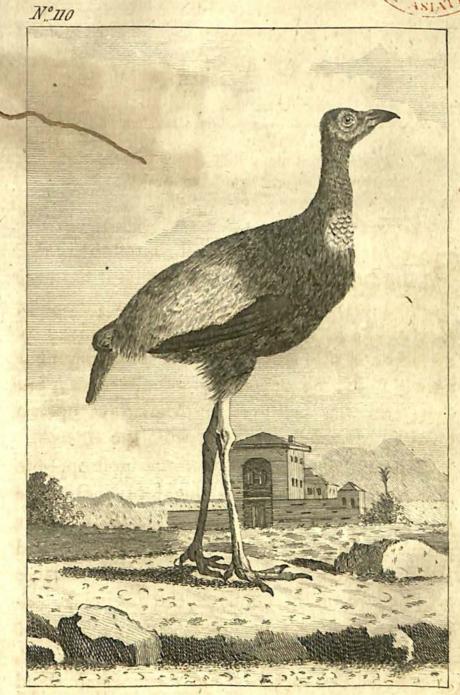
To avoid confusion, we shall restore to this bird the name of Agami, which it has ever received in its native region. In a preceding part of the present work, we were deceived by the account of Father Dutertre, and have mentioned it by the appellation of Caracara; but that term was bestowed by Marcgrave upon a bird of prey totally different from the Agami.

Naturalists have entertained the most opposite opinions with regard to this bird. Dutertre supposes it to be a Pheasant; Barrere reckons it a Wild Hen; Pallas terms it a Crane; and Adanson seems to infinuate that it is a large aquatic bird of the genus of the Lapwing, because its knees are prominent, and its hind-toe is placed a little higher than the three fore-toes, and because it appears the intermediate kind between the Jagana and the Kamichi.

But

<sup>\*</sup> It is called Trompetero by the Spaniards of the province of Maynas, and Agami by the French at Cayenne.

S HUNTING



THE GOLD-BREASTED TRUMPETER.

But the Agami is quite a distinct race. It resembles indeed the aquatic birds in the character which Adanson has properly remarked, and
also the greenish colour of the legs; but its
nature is entirely different. It inhabits the arid
countains, and the upland forests; and never
visits the sens, or the margins of water.—We
have here another example of the errors into
which artificial systems lead.

Nor is it a Pheasant or Curasso; for not only are its legs and thighs different, but its toes and nails are much shorter. Still more is it widely separated from the Common Hen; and it cannot be ranged with the Cranes, since its bill, its neck, and its legs, are much shorter than in the aquatic birds.

The Agami is twenty-two inches long; its bill, which is exactly like that of the gallinaceous tribe, is twenty-one lines; its tail is very short, not exceeding three inches and one-fourth, and is concealed by the superior coverts, and does not project beyond the wings; its legs are five inches high, and completely covered with small scales, as in the other gallinaceous birds, and these scales reach two inches above the knees, which are not feathered.

The whole of its head, its throat, and the upper half of its neck, both above and below, are covered with a short down, which is very close, and feels very soft; the fore-part of the lower surface of the neck, and the breast, are covered c c c 4 with

with a beautiful gorget four inches broad, whose brilliant colours vary between green, gold green, blue, and violet; the upper-part of its back, and the contiguous portion of its neck; are black; the plumage changes on the hind-part. If the back into a tawny-rufous; but all the und a fide of the body is black, and also one wings and the tail; only the great feathers which extend on the rump and the tail, are light ash-coloured; the legs are greenish.

The nomenclators\* have also confounded the Agami with the Macucagua of Marcgrave, which is the great Tinamou, and of which we shall treat in the following article, under the name of Magua. Adapton is the first who detected this error.

Pallas † and Vosmaër ‡ have accurately ascer-t tained the singular power which this bird has of emitting

\* Barrère, Briffon, Volmaër, &c.

† "The larynx, which without the breast is of the thickness of a swan's quill, and almost bony, grows much slenderer at its entrance, into the breast, looser, and cartilaginous, whence proceed two semi-cylindrical canals formed of membranes, and capable of extension.

within the breast it is divided into three or four cells by transverse membranous diaphragms. That on the left-fide is much narrower, and terminates in the loins." Miscel. Zoolog. p. 71.

The most characteristic and remarkable property of these birds consists in the wonderful noise which they often make, either of themselves, or when urged by the keepers of the menagerie. I do not wonder that hitherto they have been supposed to form this through the anus. It cost me no little trouble to convince myself of the contrary. To succeed, one must be on the ground, and with

emitting a dull hollow found, which was fup-, posed to come from the anus\*, and have disco-

\* M. de la Condamine entertained this opinion. Voyage des Amazous, p. 175

a bit of bread entire the bird to come near; then make the noile, which the keepers can well imitate, and often dispose the Agami to repeat it. This equivocal noise is sometimes preceded by a savage cry, interrupted Ly a found approaching that of scherck, scherck, to which fucceeds the hollow fingular noise in question, which refembles somewhat the moan of pigeons. In this way it utters five, fix, or seven times, with precipitation, a hollow noise emitted from within its body, nearly as if one pronounced tou, tou, tou, tou, tou, with the mouth thut, refling upon the last ten ... a very long time, and terminating by finking gradually with the same note. This found also resembles much the lengthened doleful noise which the Dutch bakers make, by blowing a glass trumpet, to inform their customers when the bread comes out of the oven. found, as I have already faid, iffues not from the anus; yet I am very confident, that it is formed by a flight opening of the bill, and by a fort of lungs peculiar to almost all birds, though of a different form! This is also the opinion of M. Pallas, who heard it often with me, and to whom I gave one of the dead birds for difsection." The doctor has communicated to me his observations with respect to the internal structure of the animal, for which I am much obliged to him. "The wind-pipe," fays he, "before its entrance into the breast, is as thick as a large writing-pen, bony, and quite cylindrical. In the breaft it becomes cartilaginous, and divides into two femi-circular canals, which pass through the lungs, the left one being very thort, but the right one reaching the bottom', of the lower belly, and parted by transverse membranes into three or four lobes."

These lungs therefore are undoubtedly the instrument of the various cries emitted by birds. The air pressed by the impulsive action of the sibres, seeks to escape through the large branches of the sleshy lungs, and meets with an obstruction some the little elastic membranes; which produces pulsations, the origin of all forts of sounds +. But, what above all convinces us that this noise proceeds not from the anus, if a person observes attentively when the bird makes it, he will perceive the breast and belly to heave, and the bill to open somewhat. Vosmaer, Amsterdam, 1768.

17. Memoires de l'Academie des Sciences, année 1753, p. 293.

vered that this is a mistaken notion. We shall only observe that in many birds; as well as in the Agami, the windpipe is bony at its opening, and becomes cartilaginous in its descent, and in general the cries of such birds are deep; but there are also many birds on the other hand whose windpipe is cartilaginous at its rise, and terminates bony in the breast, and these have commonly shrill notes.

1 The odd fort of noise which this bird makes, is probably owing to the extent of lungs, and the capacity of their membranous cells. But it is unnecessary to suppose with Vosmäer, that the Agami is obliged to open its bill a little in order to give passage to the found; for any suddenmotion in the bowels is communicated through the muscles and teguments to the external air; which conveys the impulse to the ear. We have often occasion to notice this circumstance; and it appears to be prejudice that the founds produced by animals are always transmitted through , the throat, or through the alimentary canal. Not is this species of ventriloguism peculiar to the Agami; the Curaffo without opening its bill makes a fimilar hollow found, which is even more articulate and more powerful. Indeed the fame property scems to obtain, though in a less , degree. In many kinds of birds in which the lungs are proportionally larger than in the quailifupeds. The hoarse murmur which the Turkey, rock makes before his gobble, the cooing which the

the Pigeon effects without motion of the mouth, are of this nature; only in these the sound rises near the bottom of the throat; but in the Curasso, and especially in the Hocco, it has its origin deeper.

In regard to the manner in which the Agami lives in the domestic state, I shall quote the words of Vosmaër:-" When these birds are well kept, they are attentive to cleanliness, and often peck the feathers of the body and wings with their bill: if they frolic with each other, they perform all their movements by hopping, and violently flapping their wings. The change of food and of climate certainly cools here (in ' Holland) their natural ardor for propagation. Their ordinary subsistence is grain, such as buckwheat, &c., but they also eat readily small fish, flesh, and bread. This fondness for fish, and the incommon length of their legs, shew that they partake of the nature of the Herons and Cranes. and that they belong to the class of the aquatic birds." We must observe here that the fondness for fish is no proof, since poultry are as greedy of this fort of food as of any other. What Pistorius relates," continues Vosmaër, "with respect to the gratitude of this bird, may put many to the blush. When tamed, it distinguishes its master and benefactor with marks of its affection. Having reared one, I had an opportunity of experiencing this myself: when I opened its cage in the morning, the kind animal

mal hopped round me, expanding both his wings, and trumpeting (this is the term which we may employ to express the noise) from his bill, and behind, as if he wished me good morning. He shewed no less attention when I went out and returned again; no sooner did he perceive me from a distance than he rap to meet me: and even when I happened to be in a boat, and fet my foot on shore, he welcomed me with the same compliments, which he reserved for me alone, and never bestowed them upon others."

We'fhall subjoin a number of additional facts, which were communicated by M. de Manon-cour.

In the state of nature the Agami, inhabits the valt forests in the warm climates of American and never visits the cleared grounds, fill less the It associates in numerous flecks, fettled foots. and prefers not the swamps and fides of lakes y for it is often found on the mountains, and inlilly fituations. It walks and runs rather than flies, fince it never rifes more than a few feet, and only to reach some short distance, ion to gain forme low branch. It feeds upon wild fruits, like the Curaffos, the Marails, and other gallinaceous. birds. When surprised in its haunts, eit makes. its escape by swiftness of feet, seldom using its , wings, and at the same time emits a shrill crylike that of the Turkey.

These birds scrape the earth at the goots of the large trees to form a bed for their eggs ; and employ

employ no lining, and construct no nest. They lay many eggs, from ten to sixteen; but the number is proportioned, as in all other birds, to the age of the semale; they are almost spherical, larger than hens eggs, and tinged with light green. The young Agamis retain their down, or rather their first dishevelled feathers, much longer than our chickens, or infant-partridges: these are sometimes near two inches long, and before a certain age they might pass for animals, covered with silky hairs, which are close like fur, and feel soft; the true feathers appear not till they have attained the sourch of their sull growth.

The Agami is not only tamed eafily, but becomes attached to its benefactor with all the fondness and fidelity of dogs; and of this difposition it shews the most unequivocal proofs. When bred up in the house, it loads its master with careffes, and follows his motions, and, if it conceives a dislike to persons on account of their forbidding figure, their offensive smell, or of in-' juries received, it will purfue them fometimes to a confiderable distance, biting their legs, and testifying every mark of displeasure. It, obeys the. voice of its master, and even answers to the call of all those to whom it bears no grudge, It is fond of careffes, and offers its head and neck to be stroked; and if once accustomed to these familiarities, it becomes troublesome, and will por · be satisfied without continual fondling, ... It makes,

its appearance as often as its master sits down to table, and begins with driving out the dogs and cats, and taking possession of the room: for it is so obstinate and bold, that it never yields, and often after a tough battle, can put a middle-fized dog to flight. It avoids the bites of its antagonist by rising in the air, and retaliates with violent blows with its bill and nails, aimed chiefly at the eyes; and after it gains the Superiority, it pursues the victory with the utmost rancour, and, if not parted, will destroy the fugitive. By its intercourse with man, its instincts became moulded like those of dogs; and we are asfured the Agamis can be trained to tend a flock of sheep. It even shews a degree of jealousy of its. rivals; for when at table it bites fiercely the naked legs of the negroes, and other domestics, who come near its master. 114

The flesh of these birds, especially when they are young, is not ill-flavoured, but is dry, and commonly hard. The rich brilliant part of the plumage which covers the breast, is separated from the rest, and prepared for the ornaments of dress.

M. De la Borde has also communicated the following particulars in regard to this bird. "The wild Agamis," says he, "are dispersed "in the back country, and are no longer found "in the neighbourhood of Cayenne. I and they "are very common in the remote unsettled tracts... They are always found in the link mense

" mense forests, in flocks from ten and twelve to " forty.... They fly from the ground to the " low trees, where they remain still, and in " fuch fituation the hunters often kill feveral "without scaring away the rest.... Some equipersons imitate their hoarse murmur so exactly, " as to decoy, them to their feet. ... When the "hunters discover a flock of Agamis, they de-" fift not till they have killed several: these birds " feldom or never fly, and their flesh is but " ordinary, black, and always hard; however, "that of the young ones is more palatable.... " No bird is fo easily tamed as this, and there "are always many of them in the streets of ", Cayenne.... They even roam out of town, but return in due time to their master. "They allow one to come near them, and handle "them at pleasure; they are afraid neither of dogs, nor of birds of prey, in the court-yard; "they, assume, the ascendency over the poultry; " and keep them in great subjection: they feed "·like the hens, the Marils, and the Paraguas; ", but when very young, they prefer final! " worms and flesh to every thing else. The "Almost all the birds have a trick of follow-"ing people through the streets and out of town, " even persons that they had never seen before. "It is difficult to get rid of them: if you enter a house, they will wait your return, and again "noin you, though often after an interval of "three hours," "I have fometimes," adds M. St . 9 . 4

de la Borde, "betaken myself to my heels, but "they ran faster, and always got before me; and when I stopped, they stopped also. I know one which invariably follows all the strangers who enter its master's house; accompanies them into the garden, takes as many turns as they do, and attends them back again \*."

As the habits and economy of this bird were little known, I have thought proper to transcribe the different accounts which I have received. It appears that of all the feathered tribes, the Agami is the most attached to the fociety of man; and in this respect it is as eminently distinguished above them all, as the dog is above the other quadrupeds. The disposition of the Agami is the more remarkable, fince it is the only bird that has a focial turn; whereas feveral of the quadrupeds discover attachment to man. though inferior in degree to that of the dog. And is it not strange, that an animal, so peculiarly formed for fociety, has never been domesticated? Nothing can better shew the immense distance between the civilized man and the rude savage, than the dominion obtained over the lower creation. The former has made the dog, the horse, the ox, the camel, the elephant, the rein-deer, &c. subservient to his. utility, or his pleasure: he has drawn together

<sup>\*</sup> Note communicated by M. de la Borde, King's physician at Cayenne, in 1776.

the hens, the geefe, the turkies, and the ducks, and has lodged the pigeons. The favage has overlooked advantages the most obvious and the most essential to his comfort. It is society that gives spring to activity; that awakens the dormant faculties; and that expands, informs, and enlivens the whole! [A]

[A] Specific character of the Gold-breasted Trumpeter:—
"Its head and breast are smooth and shining green."

## The TINAMOUS\*

HESE birds, which are peculiar to the warm parts of America, may be regarded as a part of the gallinaceous class; for they resemble the Bustard and Partridge, though they differ in feveral properties. But there are certain habits in animals which refult from the nature of the climate, and from local circumstances, and which ought not to be deemed effential characters.— Thus many birds, such as Partridges, which remain constantly on the ground in Europe, perch in America; and even the palmated aquatic fowls, pass the day in the water, and return to lodge during the night among the 'trees. The dangers with which they are furrounded. appear to drive them to fuch retreats. The immense swarms of insects and reptiles, engendered by the heat and the moisture of the climate, threaten every moment their destruction. If they ventured to repose upon the ground, the dense columns of ants would attack them in their flumbers, and reduce them to skeletons. Quails are the only birds in those countries which rest upon the surface; and they often fall a prey to the voracity of the ferpents. Nor is it im-

<sup>\*</sup> This is the name given to these birds in Guiana...
probable,

probable, that the Quails have been introduced fince the discovery of America, and that they have not yet acquired the habits suited to their new situation, or learned to guard against the assaults of their numerous soes.

We should have ranged the genus of the Tinamous after that of the Bustard; but these birds
were, at that time, but imperfectly known, and we
are indebted to M. de Manoncour for the principal facts relating to their history, and also for
the specimens presented to the Royal Cabinet,
from which we have made the descriptions.

The Spanish inhabitants of America\*, and the French fettlers at Cayenne, have both termed these birds Partridges; and the appellation has been adopted by some nomenclators +, though altogether improper: for the Tinamous are diftinguished by their long slender bill, blunt at. the tip, black above, and whitish below; their nostrils oblong, and placed near the middle of their bill; their hind-toe is very short, and does not rest upon the ground; their nails are very fhort, broad, and channelled beneath; their legs also differ from those of Partridges, being covered behind, as in the poultry, with scales, their whole length, shaped like small shells; but the upperpart projects and forms inequalities not observed on the legs of poultry. In all the Tinamous,

<sup>\*</sup> Letter of M. Godin des Odonnais, to M. de la Condamine, 1773, p. 19. note first.

<sup>→</sup> Brisson.

—Barrere.

the throat and craw are thinly strewed with straggling feathers; the quills of the tail are so short, that in some they are wholly concealed by the superior coverts.—Thus they are improperly named Partridges, since they differ in so many essential characters.

But they differ also from the Bustard, by several of their principal characters, and especially by having a fourth toe behind, which is wanting in the Bustard. In short, we have judged it requisite to range them in a separate genus, under the name which they receive in their native country.

All the species of the Tinamous pass the night upon the trees, and sometimes perch during the day; but they always settle among the lowest branches, and never mount to the summits: and this circumstance seems to imply the probability that they are not actuated by original impulse, but directed by considerations of safety.

The Tinamous are, in general, excellent for the table; their flesh is white, firm, close, and juicy, especially about the wings, and tastes like that of the Red Partridge. The thighs and rump have commonly a disagreeable bitterness, which is occasioned by the fruit of the Indian reed upon which they feed. The same bitter taste is observed in the Ring-Pigeons which eat these fruits. But when the Tinamous live upon other fruits, such as wild cherries, &c. their flesh is uniformly delicate, but still has none

of the fumet. In the fultry humid climate of Cayenne, meat will not keep more than twentyfour hours from putrefaction, and no fort of game can be allowed time to mellow and acquire that delicious flavour which constitutes its excellence. These birds, like all those which have a craw, often swallow the fruits without bruifing or even cracking them; they are particularly fond of the wild cherries, and also of the produce of the common palm, and even of that of the coffee-shrub, when they can find it. do they cull their subsistence from the trees; they only collect the fruits which have dropped. They scrape the ground to form their nest, which is usually nothing but a single layer of dry herbs, They lay twice a-year, and have numerous broods; which shews that these birds and the Agamis are of the gallinaceous class, which is remarkably prolific. Like these also, they fly heavily, and to short distances, but run swiftly on the ground; they form little flocks, and it is uncommon to find them either fingle or in pairs; they call each other in all seasons; in the morning and evening, and fometimes too during the day: this call is a flow, quavering, plaintive whistle, which the fowlers imitate to bring them near; for this game is the most common and the best which that country affords.

We shall add a remarkable circumstance with respect to these genus of birds, that, as in the Anters, the semale is larger than the male; a

property which in Europe is found only in the rapacious tribe. In the shape of the body, however, and in the distribution of the colours, the semales are almost entirely like the males.

#### The GREAT TINAMOU.

Le Magona, Buff.
Tinamus Brafilienfis, Lath. Ind.
Tetras Major, Gmel.
Perdix Brafilienfis, Briff.
Macucagua, Ray, Will. and Klein.

#### First Species.

This bird is as large as a Pheasant, and, according to Marcgrave, it has twice as much flesh as a plump hen \*. The throat and the lower-part of the belly are white; the upperpart of the head is deep rusous; the rest of the body is of a brown-gray variegated with white on the top of the belly, the sides, and the coverts of the thighs: there is a little greenish on the neck, the breast, the rise of the back, and the superior coverts of the wings and of the tail, on which some blackish transverse spots are observed, that are less numerous on the coverts of the tail; the brown-gray is deeper on the rest of the body, and variegated with black transverse spots.

This bird eats, according to that author, wild beans, and the fruit of a tree called in Brazil, araeica.



THE GREAT TINAMOU.

which are less frequent near the rump: there are also some small black spots on the lateral quills of the tail; the middle quills of the wings are variegated with rusous and brown-gray, and terminated by a rusty border; the great quills are cinereous, without any spots or border; the legs are blackish, and the eyes black, and a little behind them the ears are placed, as in the poultry. Piso remarks, that the internal structure of this bird is exactly like that of the hen.

The fize varies in different subjects: the average measures are, total length sisteen inches, the bill twenty lines, the tail three inches and a half, the legs two inches and three-fourths; the tail projects an inch and two lines beyond the wings.

The call of the Great Tinamou is a hollow found, which may be heard at a great distance, and is whistled precisely at six o'clock in the evening, the time when the sun sets in that latitude. It is silent during the night, unless it be scared.

The female lays twelve or fifteen eggs, which are almost round, rather larger than hens eggs, of a beautiful greenish blue, and are excellent eating. [A]

<sup>[</sup>A] Specific character of the Tinamus Brafiliensis, LATH. —

"It is dusky-olive, spotted with dusky, its belly whitish and va
"riegated, the thighs rough behind."

# The CINEREOUS TINAMOU.

Tinamus Cinereus, Lath. Ind. Tetrao Cinereus, Gmel.

### Second Species.

The epithet cinereous will serve for a description of this bird; for that colour is uniform over the whole body, except a tint of rusous on the head and the top of the neck. It has the same shape as the other, only it is smaller. It is a new species communicated by M. de Manoncour. It is of all the Tinamous the least frequent in Cayenne.

Its length is a foot; its bill fixteen lines; its tail two inches and a half; and its legs the fame. [A]

[A] Specific character of the Tinamus Cinereus: LATH.:—
It is cinereous-brown, its head and neck tawny."

# The VARIEGATED TINAMOU.

Tinamus Variegatus, Lath. Ind. Tetrao Variegatus, Gmel.

# Third Species.

This species, which is the third in the order of size, differs from the two first by its variegated plumage.

plumage. The Creoles of Cayenne call it the Pintado Tinamou; but this appellation is improper, for it bears no resemblance to the Pintado, and its striped plumage is not dotted. Its throat and the middle of its belly are white; its tail, its breaft, and the top of its belly, rufous; its fides and its thighs striped obliquely with white, with brown, and with rufous; the upper-part of its head, and the top of its neck, black; all the upper-part of its body, the superior coverts of its tail and of its wings, and the middle quills of its wings striped transversely with black and olive brown, deeper on the back, and lighter on its rump and on its flanks; the great quills of its wings are brown, and uniform without a fpot; its legs are blackish.

Its total length is eleven inches; its bill fifteen lines; its tail two inches, and exceeds the wings by fix lines.

It is pretty common in Guiana, though not so numerous as the Great Tinamous, which occur indeed the most frequently in the woods, for none of these three species haunt the cleared ground. The female Variegated Tinamou lays ten or twelve eggs, which are rather smaller than those of the hen Pheasant, and are uniformly tinged with a beautiful black. [A]

<sup>[</sup>A] Specific character of the Tinamus Variegatus of LATH.:—
"It is striped with rusous, brown, and blackish; below rusous,"
with a black cap; its throat, and the middle of its belly,
white,":

### The LITTLE TINAMOU.

Le Soui, Buff. Tinamus-Soui, Lath. Ind. Tetrao-Soui, Gmel.

### Fourth Species.

Soui is the name by which this bird is known in Guiana, and which was given by the natives of the country. It is the smallest of the genus, not exceeding eight or nine inches in length, and not being larger than a Partridge. Its flesh is as delicate as that of the other kinds, but it lays only five or fix eggs, and fometimes no more than three or four, which are rather larger than Pigeons eggs; they are almost spherical, and as white as those of hens. The Little Tinamous do not form their nest like the Great Tinamous, by scraping the ground; they build it with long narrow leaves on the lowest branches of shrubs: it is hemispherical, about fix inches in diameter, and five inches high. all the four species, this is the only one which does not live constantly in the woods; it often frequents the young straggling trees and bushes, which shoot up in land that has been cultivated and abandoned; and fometimes it even visits dwellings.

Its throat is variegated with white and rufous; all the under-part of its body and the coverts of its thighs are of a light-rufous; the upper-part of its head and of its neck are black; the lower-part of its neck, its back, and all the under-part of its body, are brown, radiated with dull blackish; its superior coverts and the middle quills of its wings are brown, edged with rufous; the great quills of its wings are brown, without any spots or borders; its tail projects ten lines beyond its wings, but is exceeded by its own coverts. [A]

[A] Specific character of the Tinamus-Soui of LATH.—

"It is clouded with brown; below rufous; its throat variegated

with white; the upper-part of its head and the hind-part of its

neck, black."

# The TOCRO

Tetrao Guianensis, Gmel. Perdix Guianensis, Lath. Ind. The Partridge of Guiana, Bust.

Partridge, and its plumage deeper: but in other respects, it is exactly similar; in its figure, in the proportions of its body, in the shortness of its tail, and in the shape of its bill and legs. The natives of Guiana call it *Tocro*, a name which well expresses its cry.

These Partridges of the New World have nearly the same habits as those of Europe; only they still continue in the forests, because they have not been accustomed to cleared grounds. They perch on the low branches of the bushes, but only to pass the night; which is to avoid the damp, and perhaps the swarms of insects. They lay commonly twelve or sisteen eggs, which are entirely white; the sless of the young ones is excellent, but has no fumet. The old ones are also eaten, and are even more delicate than ours; but the rapid progress of putrefaction in those climates will not allow sufficient time for acquiring the proper flavour.

As our Gray Partridges do not intermix with our Red Partridges, it is highly probable that the Brown Partridges of America would breed with neither, and consequently are a separate species. [A]

[A] Specific character of the *Pendix Guianens* of LATH.—

"It is rufous-brown, spotted and variegated; its throat is cine
reous; a fulvous fillet passes over its eyes; its wing-quills are

marked externally with rusous spots."

### The FLYCATCHERS.

Les Gobe-Mouches, Moucherolles & Tyrans, Buff.

YATURE has affigned these a place after the humblest of the rapacious tribes. Thev are harmless and even useful; they consume not fruits, but live upon flies, gnats, and other winged infects. The genus comprehends nu-, merous species, which vary exceedingly in point of fize, from that of the Nightingale to that of the Shrike. Some characters however are common to them all: their bill is compressed, broad at the base, and almost triangular, beset with briftles, and the tip bent into a little hook in many of the middle species, and more curved in all the large species; the tail is of considerable length, and only half covered by the wings. Their bill is also scalloped near the point; a property which they share with the Blackbird, the Thrush, and some other birds.

Their disposition is in general shy and solitary, and their notes are neither lively nor melodious. Subsisting in the region of air, they seldom leave the summits of the losty mountains, and are rarely seen on the ground. Their habit of clinging to the branches would seem to have increased

the growth of their hind-toe, which in most of the Flycatchers is longer than the fore-toe.

The fultry tropical countries, which teem with various infects, are the favourite abodes of these birds\*. Two species only are found in Europe; but we reckon eight in Africa, and in the warm regions of Asia, and thirty in America, which are also the largest species; and as in the New World the insect nations are the most numerous and the most formidable, so Nature has provided a stronger body to prey upon them. -We shall range them according to their fize . into three divisions: the first are smaller than that of the Nightingale, and are the Flycatcher's properly fo called; the fecond are fomewhat larger; and may be termed Moucherolles; the third are. the Tyrants, which are nearly as large, if not larger than the Wood-chat, or Rufous Shrike, and refemble in their shape and instinct the genus of the Shrikes, which feems to connect the class of rapacious birds with the Flycatchers.

<sup>\* &</sup>quot; The Flycatchers are in general common birds in hot countries. The species are there more frequent and more numerous than in temperate countries; and few occur in cold climates. They feed only upon infects. They are destructive creatures, which, in the hot and moult regions, Nature has opposed to the excessive fecundity of the insects." Voyage à la Nouvelle Guinée, par M. Sonnerat.

### The SPOTTED FLYCATCHER

 Le Gobe-Mouche, Buff.
 Muscicapa-Grisola, Linn. and Gmelo Grisola, Aldrov.
 Sylvia Fusca, Klein.
 Muscicapa, Briff.
 The Cobweb, Mort. Northamp.

# First Species.

This species being well known, will serve as a term of comparison.—It is five inches eight lines in length; its alar extent eight inches and a half; the wings, when closed, reach to the middle of its tail, which is two inches long; its bill is flat, broad at its base, and eight lines long, beset with briftles: its whole plumage consists of these three colours, gray, white, and blackish cinereous; its throat is white; its breast and the fides of its neck are spotted with faint ill-defined brown; the rest of the under-part of its body is whitish; the upper-part of its head appears variegated with gray and brown; all the higher-part of its body, its tail, and its wings, are brown; the quills and their coverts are lightly fringed with whitish.

The spotted Flycatchers arrive in April, and depart in September. They live generally in the forests, and prefer the folitude of the close shady spots; and sometimes they are found in the thick



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FIG-1.THE SPOTTED FLY-CATCHER OF LORRAIN. FIG-2.THE COMMON SPOTTED FLY-CATCHER.

thick vineyards. They have a melancholy air; their disposition is wild, inanimate, and even stupid: they place their nest, entirely exposed, either on the trees or the bushes. No small bird is so incautious, and none has instincts so 'unsettled. The nests are not of an uniform construction; some consist entirely of moss, and others have a mixture of wool. They confume much time and labour upon the rude structure, and sometimes we find it interwoven with thick roots, and are surprized that so small an artificer could employ such materials. They lay three or four eggs, fometimes five, which are covered with rufous spots.

These birds procure the principal part of their fubfistence while on the wing, but feldom alight,. and then only by starts, upon the ground, and never run along it. The male is not different from the female, except that its face is more variegated with brown, and its belly is not fo white. They appear in France in the spring, but the cold weather which sometimes prevails in the middle of that feason is pernicious to them. Lottinger obferves, that they almost all perished in the snows which fell in Lorraine in April 1767 and 1772, and that they were caught by the hand. degree of cold that destroys the infects, their only support, must prove fatal to them; accordingly they leave our provinces before the frost sets in, and they are never seen after the end of Séptember. Aldrovandus fays, that they do VOL. IV. E E.

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do not migrate; but this must be understood in regard to Italy, or of still warmer countries. [A]

[A] Specific character of the Spotted Flycatcher, Musiciapa-Grifola:—" It is duskish, below whitish, its neck spotted longist tudinally, its vent tawny." The Flycatcher appears in England in the spring, and retires in August. "It is of all our summer birds," says Mr. White, "the most mute, and the most samiliar. It builds in a vine, or a sweetbriar, against the wall of an house, or in the hole of a wall, or on the end of a beam or plate, and otten close to the post of a door where people are going in and out all day long. This bird does not make the least pretension to song; but uses a little inward wailing note, when it thinks its young in danger from cats or other annoyances: it breeds but once, and retires early." When its young are able to fly, it retires with them to the thick woods, and frolics among the high branches, sinking and rising often perpendicularly in quest of slies, which hum below.

# The COLLARED BLACK FLYCATCHER, or, the FLYCATCHER of LORRAINE.

Muscicapa Atricapilla, var. Linn. The Red Flycatcher, var. Lath.

# Second Species.

It appears to be better known in Lorraine, and more common than in other parts. It is rather smaller than the preceding, being scarcely sive inches long; it has no other colours than white and black, which are dispersed in distinct spots; but its plumage notwithstanding varies more remarkably than that of any other bird.

The

The male appears to have four different garbs, according to the seasons. The first is that of the autumn, or winter, when the plumage is the fame with that of the female, which is not fubiect to such changes. The fecond is worn when these birds arrive in Provence or Italy, and is then exactly like that of the Epicurean Warbler. The third is what they assume shortly after their appearance, and may be termed the Ipring attire \*. This is only the intermediate gradation to the fourth state, which is that of fummer, and which, as Lottinger observes, may be properly termed its marriage suit, because it as-Sumes this at pairing, and lays it aside after the breeding is over. The bird is then in its full beauty: a white collar three lines broad encircles its neck, which is of the finest black; its head is of the same colour, except the front and the face, which are bright white; its back and its tail are stained with the black of the head; its rump is variegated with black and white; a white streak of a line in breadth borders for fome way the outermost quills of the tail; the wings, confifting of seventeen quills, are of a deep chesnut; the third and the four following are tipt with a much lighter brown, which, when the wings are closed, has a very fine effect: all the quills, the two first excepted,

<sup>\*</sup> I fed one this spring three or sour days. Every person-admired it, though one of its sinest ornaments (the collar) was wanting. The white and black of its plumage were of the brightest tints." Letter of M. LOTTINGER, 30th April 1772.

have a white spot on the outer edge, which enlarges the nearer it is to the body; fo that the outer-edge of the last quill is entirely white; the throat, the breast, and the belly are white; the bill and the legs black. There is a remarkable lustre and gloss spread over the whole of the plumage; but these beauties are gone before the beginning of July. The colours grow dilute and dusky; the collar first disappears, and the rest foon becomes stained and obscure, and the male is no longer distinguishable from the female. "I have frequently met with bird-catchers," fays Lottinger, " who fpread the nets on the fprings " in places where they breed; and though it " was only in July, they told me that they caught " numbers of females, but not a fingle male;" so entirely was the external distinction of sex -obliterated. That naturalist has not described forfully the vernal plumage with which they enter into the southern provinces. However. Aldrovandus feems to indicate the change of this Flycatcher, which he has well described in another place \*, when, ranging it again with the Becafigos, he tells us of his having surprized it at the very instant of its transformation, being then neither an Epicurean Warbler, nor a Black-Cap. Already, he fubjoins, the collar was become white; there was a white spot on the front;

white

<sup>\*</sup> He describes its collar, the white spot on its wing: he commends its beauty. It is known, he says, by the sowlers of Bologna, under the name of Peglia-Mosche.

white on the tail and the wings; the under-part of the body white, and the rest black. These properties sufficiently discriminate the Collared Black Flycatcher.

This bird arrives in Lorraine about the middle of April. It lives in the forests, those especially which consist of tall trees, and breeds in the holes of the trunks, sometimes pretty deep, and at a considerable height above the surface of the ground. Its nest is formed of small stalks of grass, and a little mose, which covers the bottom of the cavity. It lays six eggs. After the young are hatched, the parents frequently go in and out, carrying supplies of food; and this care of their infant brood often betrays the retreat, which would otherwise be difficult to discover.

They subsist only upon slies, and other wingyed insects. They are never seem on the ground; and for the most part they keep very high, sluttering from tree to tree. They have no song, but only an exceeding shrill plaintive accent, which turns upon the sharp nose errs, errs. They appear sad and gloomy; but their attachment to their offspring inspires activity, and even courage.

Lorraine is not the only province in France where the Collared Black Flycatcher is found. Hebert has informed us, that one was seen in Brie, but where it is little known, because it is wild and transitory. We ourselves found one

1 1 W

of these Flycatchers on the tenth of May 1773, in a fmall park near Montbard in Burgundy; and it was in the same state of plumage as that described by Brisson. Of the great coverts, which he fays are tipt with white, those only which were next the body were fuch, and the more remote were brown; the inferior coverts alone of the tail were white, the superior ones were blackish-brown; the rump was dull pearlgray; the nape of the neck where the collar was , fituated, was lighter than the head and the back; the middle quills of the wings were near the tip of the same brown as the great quills; the tongue appears to be indented at the tip, broad for the fize of the bird, but proportioned to the breadth of the bottom of the bill; the intestinal tube was eight or nine inches long; the gizzard muscular, preceded by a dilatation of the afophagus; there were some marks of a cæcum; and no gallbladder. The bird was a male, and the testicles feemed to be a line in diameter; it weighed three gros.

In this species of Flycatchers, the ends of the wings meet, and stretch beyond the middle of the tail; which is the reverse of what generally takes place in the genus.— There are several inaccuracies in the sigures given of it in the Planches Enluminées.

This pensive bird enjoys a quiet peaceful life, protected by solitude. It avoids the cold season, and shifts the scene to the genial climes of the south,

fouth, there to renew its loves. They are found, however, pretty far north, fince they inhabit Sweden\*.—There are two species from the Cape of Good Hope, which seem to be the same with that of Lorraine; the first, being distinguished only by a rusty spot on the breast; and the second is only the semale. The difference of appearance is very slight, if we estimate the influence of so distant a climate.

Fauna Suecica.

### The UNDULATED FLYCATCHER.

Le Gobe-Mouche de l'Ile de France, Buff, Muscicapa-Undulata, Gmel.

# Third Species.

We have in our cabinet two Flycatchers sent from the Isle of France; the one rather black than brown, and the other simply brown. Both are smaller, and especially shorter, than the European Flycatchers. In the first, the head is blackish-brown, and the wings rusty-brown; the rest of the plumage is a mixture of whitish and of a brown, like that of the head and wings, disposed in small waves, or small spots, without much regularity.— The second appears to be only the semale of the first. In fact, the differences are too slight to constitute two species; for the size, the sigure, the colours, and almost

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the shades are similar. The second has indeed more white, mixed with rusty on the breast and belly; the brown-gray on the head and body is more dilute; but the colours of the semale are lighter in all the species of birds. [A]

[A] Specific character of the Mufcicapa Undulata: — "It is "waved with whitish and brown; its head partly blackish; its "wings dusky rusous."

# The SENEGAL FLYCATCHER.

Le Gobe-Mouche à Bandeau Blanc du Senegal, Buff. Musicapa Senegalensis, Linn. and Gmel.

# Fourth Species.

Under this appellation we shall comprehend the two birds figured in the Planches Enluminées, by the names of Rufous-breafted Flycatcher of Senegal, and Black-breasted Flycatcher of Senegal. These handsome birds may be described together; they are of the same size, and are natives of the same climate; and the distribution of their colour is fimilar in both. At is probable that they are the male and female of the same species. The white line which passes upon the eye, and encircles the head with a fort of little diadem, is not so entire or distinct in any other of the genus. The first is the smaller, being only three inches and a half long; a rufous spot covers the top of the head, which is surrounded by the white

white ring: from the exterior angle of the eye an oval black fpot extends, which is bounded above by the ring, and ftretches into a point near the tip of the bill; the throat is white; a light rufous spot marks the breast; the back is light-gray, fpread upon white; the tail and the wings are blackish. A white line extends obliquely on their middle coverts, and the same coverts are edged with scales of the rusous colour of the breaft. A glossy transparency is spread over all the plumage of this bird; still lighter and more vivid on that of the other, which is simpler in its colours, confisting of a mixture of light gray, of white, and of black, and is not inferior in point of beauty; the white bar passes upon the eyes; a horse-shoe of the fame colour rifes pointed under the bill, and is cut square on the breast, which is distinguished by a black belt; the top of the neck is black, which mingling with the white of the back melts into gray; the quills are black, fringed with white, and the white line of the coverts opens, into festoons; the shoulders are black; but there is a little fringed white interwoven with all this black; and through all the white of the plumage small black shades are interspersed. which are so light and transparent, that this little, bird is more beautiful than many which are decorated with a profusion of rich and vivid tints. [A]

<sup>[</sup>A] Specific character of the Muscicapa Senegalensis:—16 It is 'f' variegated; its eye-brows are white; the outermost tail-quills 'the are white one half of their length,'

### The BOURBON FLYCATCHER.

Le Gobe-Mouche Huppé du Senegal, Bust. Muscicapa Borbonica, Gmel.

### Fifth Species.

We shall consider the Crested Flycatcher of the island of Bourbon as only a variety of the Crested Flycatcher of Senegal, and both as forming one species. The island of Bourbon, placed in the midst of a vast ocean, and situated between the tropics, enjoys an uniform temperature, which requires not periodical migrations, and when sirst visited by the European ships contained no land bird. Those found in it at present have been carried thither by chance or design; nor must it be regarded as the native seat of original species\*; we shall therefore class

<sup>\*</sup> We find also two Flycatchers of the isle of Bourbon, which we shall barely mention, convinced that they belong to some species on the continent of Africa. The one is represented in the Illumined Plates, No 572, Fig. 3; it is small, and quite black, except a little rufous which it has under its tail; and, notwithstanding the difference of colour, we may suppose it to be a variety of the Cape Flycatchers, which we have already referred to our Collared Black Flycatcher: these differences of plumage being apparently no other than what we see it undergo itself, and which the influence of a hotter climate must render more extensive and rapid, especially as it is naturally disposed to change. M. Brisson indicates in the following terms the third Flycatcher of the isle of Bourbon, to which he says the inhabitants give the name of Testeo: - " Flycatcher," above brown; the edges of the quills tawny; below tawny; (male). Dirty white; the tail-quills deep brown; their outer e edges light brown; (female)."

the bird discovered on the island with its analogous one of the continent. In fact, the differences between them are not greater than those which often occur among individuals of this genus; their figure, their bulk, and their principal colours, are the same; in both the head is furnished with fmall feathers, half-raised into a black crest, with green and violet reslections; this black descends in the Senegal Flycatcher like a square spot upon the breast, and the forepart of the neck. In that of Bourbon, the black covers only the head, with the eye, and also the lower-mandible; but, in other subjects, it is spread also upon the top of the neck. In both the under-part of the body is of a fine light flategray, and the upper-fide bay, which is more vivid in that of Bourbon, and deeper and chefnut in that of Senegal; and this colour, which extends equally over the whole of the tail and wings of the last, is intersected by a little white in the other, and assumes a deeper cast on the coverts, which are also fringed with three lighter The blackish colour of the quills has streaks. only a light rufty border on the outfide, and whitish on the inside of the webs. The greatest difference occurs in the tail; that of the Bourbon Flycatcher is short and square, being only. two inches and a half long; the tail of the Senegal Flycatcher is more than four inches, and is tapered from the two middle quills, which are the longest, to the outer ones, which are two inches

inches shorter. This difference may be imputed to the effect of age, season, or of sex: at any rate, the classing of them together will excite a fuller investigation, and an attention to the points of discrimination.

# The BROWN-THROATED SENEGAL FLYCATCHER.

Muscicapa Melanoptera, Gmel. The Collared Flycatcher, Lath.

### Sixth Species.

This Flycatcher was brought from Senegal' by Adanson. It is the same with what Brisson describes under the appellation of Gollared Senegal Flycatcher, which is improper, fince neither the brown foot on the throat, nor the black line that bounds it, can be termed a collar. A brown chesnut spot rises with, a straight transverse margin under the bill and the eyes, and fpreads on the throat, but extends not to the breast, being terminated at the lower part of the neck with a narrow black line, which is very distinct, as the breast, with the rest of the lowerpart of the body, is white; the upper surface is of a fine bluish gray; the tail blackish; the outermost quill is white on the outside; the great coverts of the wings are white also, the small. ones blackish; the quills are deep cinereous, fringed.

fringed with white, and the two next the body are white through their outer half; the bill is broad and flat, and befet with briftles at the angles. [A]

[A] Specific character of the Collared Flycatcher, Muscicapa Melanoptera, GMEL.—"It is cinereous; below white; the throat tawny-bay; a transverse black belt below; the bill, wings, and tail, black."

# The AZURE FLYCATCHER.

Le Petit Azur, Gobe-Mouche Bleu des Philippines, Buff. Muscicapa Cærulea, Gmel.

# Seventh Species. .

A beautiful azure covers the back, the head, and all the fore-part of the body of this pretty. Flycatcher, except a black spot on the back of the head, and another black spot on the breast; the blue extends to the tail, and gradually grows more dilute; it tinges the small webs of the wing-quills, of which the rest are blackish; and it also gives shades to the white of the ventral feathers.

This bird is rather smaller, taller, and slenderer, than the Spotted Flycatcher of Europe. Total length five inches; the bill seven or eight lines, and not scalloped or hooked; the tail two inches, slightly tapered; the blue has a glossy lustre.

### The WHISKERED FLYCATCHER.

Le Barbichon de Cayenne, Buff. Mussaupa Barbata, Gmel.

# Eighth Species. .

In all the Flycatchers the bill is beset with bristles; but, in the present, these are so long that they reach to the tip, which is the reason of its epithet whiskered. It is near five inches long; its bill very broad at the base, and very slat through its whole length; the upper mandible projects a little beyond the lower, all the upper-side of the body is deep olive-brown, except the top of the head, which is covered by orange feathers, partly concealed by the other feathers; the under-side of the body is greenish-yellow, which, on the rump, runs into a fine yellow.

The female is fomewhat larger than the male; all the upper-side of its body is blackish-brown, mixed with a slight tint of greenish, not so confpicuous as in the male; the yellow of the top of the head forms only an oblong spot, which is partly hid by the feathers of the general colour; the throat and the top of the neck are whitish; the feathers of the rest of the neck, of the breast, and of the under-surface of the wings, have their middle brown and the rest yellowish; the

THE WHISKERED FLYCATCHER. the belly and the under-furface of the tail are

entirely of a pale yellow; the bill is not fo broad as in the male, and has only a few short

briftles on each fide.

The notes of the Whiskered Flycatcher are not sharp; it whistles gently the found pipi; the male and female generally keep together. The incautious manner in which the Flycatchers place their nest is remarkable in this species; it does not feek the leafy boughs, but builds on the most naked and exposed branches. . The nest is the more easily detected, as it is exceedingly large, being twelve inches high, and more than five in diameter, and entirely composed of moss; it is closed above, and has a narrow aperture in the fide, three inches from the top. We owe our information to M. de Manoncour. [A]

[A] Specific character of the Whilkered Flycatcher, Niuscicapa Barbata, GMEL :- "It is olive-brown, below greenish-yellow, " its top orange, its rump yellow."

#### BROWN FLYCATCHER, The

Le Gobe-Mouche Brun de Cayenne, Buff. Muscicapa Fuliginosa, Gmel.

# Ninth Species.

The Brown Flycatcher is scarcely four inches long; the feathers of its head and back are blackish-brown, edged with fulvous brown; the 8 fulyous.

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fulvous is deeper, and predominates on the quills of the wing, and the black on those of the tail, which have a whitish fringe; all the under-side of the body is whitish, except a fulvous tint on the breast; the tail is square, and half covered by the wings; the bill is sharp, with small bristles at its root; -- fuch are the diffinguishing features of this little bird. Its species seems however to admit a variety, if the differences which we perceived in another subject are not to be imputed to age or fex. The dusky ground of the plumage, in this last bird, had a yellowish tint under the belly, and an olive-brown on the breast; the head and back had a slight cast of a deep olive-green, and on the great quills of the wings were some lighter streaks, but the small coverts were dyed with a pale light rofe-yellow. [A]

[A] Specific character of the Brown Flycatcher, Muscicapa Fuliginosa, GMEL:—" It is dark brown, the margin of its feathers yellowish-brown, below whitish, the margin of its equal tail-quills, and of its wing-quills, whitish."

### The RUFOUS FLYCATCHER.

Le Gobe-Mouche Roux a Postrine Orangée de Cayenne, Bust. Muscicapa Rusescens, Gmel.

# Tenth Species.

The Rufous Flycatcher is found in Guiana in the skirts of the woods and the margins of the savannas: it is easily distinguished, its breast being orange, and the rest of its body rufous: its length is four inches nine lines; its bill is very flat and broad at the base; the head and the higher-part of the neck is greenish-brown; the back is rufous, stained also with greenish-brown; the tail is entirely rufous; the black of the wing-quills does not appear when they are closed except at the point, their small webs being rufous: instead of the orange spot on the breast, white or whitish covers the underpart of the body. There is only one specimen in the King's cabinet. [A]

[A] Specific character of the Rufous Flycatcher, Muscicapa Rufescens, GMEL.: — "It is of a glossy tawny, below white, its "wing-quills black, a brown dash on its top."

# The LEMON FLYCATCHER OF LOUISIANA, Buff.

# Eleventh Species.

This Flycatcher may be compared for its fize and colour to the Yellow Wagtail. Its breaft and belly are covered with a fine lemon-colour, which is still brighter on the forehead and the cheeks; the rest of the head and neck are enveloped with a fine black, which extends below the bill, and forms a round horse-shoe on the breast; a greenish-gray covers, on the back and shoulders, the cinereous ground of the plumage, and appears in lines on the small webs of the great wing-quills. The vivacity and elegance of its colours, the glossy black conspicuous on its light yellow ground, the uniform tint of its greenish robe, conspire to render this bird one of the handsomest of the genus.

### The RED-EYED FLYCATCHER.

Le Gobe Mouche Olive de la Caroline & de la Jamaique, Buff. Muscicapa Olivacea, Linn. and Gmel. Muscicapa Jamaicensis, Briss. The Olive-coloured Flycatcher, Edw.

# Twelfth Species.

This consists of two kinds of varieties; the one described by Edwards, the other by Catesby.

The

The first is of the same bulk and proportions as those of the European Flycatchers. The upperpart of the head and body is olive-brown; a white fillet rifes above the eyes; the groundcolour of the quills is ash-brown, and they are fringed with olive for a confiderable part of their length.—The fecond kind is described by Catefby under the name of the Red-eyed Flycatcher: its colours are darker than those of the former. It breeds in Carolina, and removes to Jamaica in winter; but Sir Hans Sloane makes no mention of it. Brown however reckons it one of the migratory Jamaica It has not a great extent of notes, he tells us, but its tones are full and mellow. -This property must be peculiar to it, for all the other Flycatchers utter shrill broken founds. [A]

[A] Specific character of the Red-eyed Flycatcher, Musiciapa Olivacea, LINN.: — "It is olive, below whiter, its eye-brows- white, its eyes red." In Jamaica it is called, on account of its note, Whip Tom Kelly. It makes a pendulous nest, formed with wool and cotton, lined with hair and withered grass, and bound together by a thready moss. It lays five eggs, white, and thinly strewed with rusous spots.

### The MARTINICO FLYCATCHER.

Le Gobe-Mouche Huppé de la Martinique, Buff. Muscicapa Martinica, Linn. and Gmel. Muscicapa Martinicana Cristata, Briss.

# Thirteenth Species.

A fine brown, which is deeper on the tail, covers all the upper-part of the body of this bird as far as the head, whose small feathers, tinged with some streaks of a more vivid rufousbrown, are half erect, forming a tuft on the crown: under the bill is a little white, which foon gives place to a light flate-gray, that covers the fore-part of the neck, the breast, and the stomach; the same white appears again on the belly. The quills of the wings are blackishbrown, fringed with white; their coverts, which are fringed with the same, enter by degrees into the rufous tint of the shoulders; the tail is fomewhat tapered, its third-part hid by the wings, and is two inches long. The bird is five inches and a half. [A]

<sup>[</sup>A] Specific character of the Muscicapa Martinica: — "Its head is crested, its body brown, below cinereous, the exterior margin of its wing-quills whitish."

### The BLACK-CAP FLYCATCHER.

Le Gobe-Mouche Noirâtre de la Caroline, Buff. Muscicapa Fusca, Gmel. Muscicapa Carolinensis Fusca, Brist. The Black-headed Flycatcher, Penn.

### Fourteenth Species.

This bird is nearly as large as the Nightingale; its plumage, from the head to the tail, is of an uniform dull brown; its breast and belly are white, with a shade of yellowish-green; its thighs and legs are black; the head of the male is of a deeper black than that of the semale, and this is the only difference between them. They breed in Carolina according to Catesby, and migrate from thence on the approach of winter. [A]

[A] Specific character of the Muscicapa Fusca: — "It is brown, below othry-white; its bill, its top, and its legs black."

# The BLACK and WHITE FLYCATCHER.

Le Gillit, ou Gobe-Mouce Pie de Cayenne, Brist. Muscicapa Bicolor, Gmel.

# Fifteenth Species.

This bird, which is called Gillit in its native country Guiana, is of an uniform white on the F F 3 head,

head, the throat, and all the under-part of the body. The rump, the tail, and the wings, are black, and the small quills of these edged with white. A black spot rises behind the head, and stretches to the neck, where it is bounded by a white cap, which makes a circle on the back.—The length is four inches and a half, and the plumage of the semale is entirely of a light uniform gray. It is found in the over-flowed savannas.

The White Bellied Flycatcher of Cayenne, No 566. fig. 3. Pl. Eul. hardly differs at all from the Gillit, and we shall not separate them.

We shall also class with it the White and Black Flycatcher of Edwards, from Surinam, of which the colours are the same, except the brown on the wings, and black on the crown of the head, differences which are not specific.

### The CINEREOUS FLYCATCHER.

Le Gobe-Mouche Brun de la Caroline, Buff. Muscicapa Virens, Linn. and Gmel. Muscicapa Carolinensis Cinera, Briss.

# Sixteenth Species.

This is called by Catefby, The Little Brown Flycatcher. Its figure and fize are the same as those

those of his Olive Flycatcher with red eyes and legs, and we should have ranged them together, had not that accurate observer distinguished them. A dull brown tint, which covers uniformly all the upper-part, is intersected by the rusty-brown of the feathers of the wings and tail; the underpart of the body is dirty white, with a shade of yellow; the thighs and legs are black; the bill is slat, broad, and a little hooked at the point, and eight lines in length; the tail is two inches; the whole length of the bird five inches eight lines; it weighs only three gros.—This is all that Catesby informs us; and from him the rest have borrowed their descriptions. [A].

[A] Specific character of the Muscicapa Virens: — "It is greenish-brown, below yellow, its eye-brows white."

# The ACTIVE FLYCATCHER.

Le Gobe-Mouche de Cayenne, Buff. Muscicapa Agilis, Gmel.

### Seventeenth Species.

This Flycatcher is not larger than the Yellow Wren of Europe; its plumage is almost the same, being cinereous and dirty white in both, only this little bird has a greater mixture of greenish. The flatness of its bill indicates its relation to the Flycatchers. Our Wrens however have the same instincts, and feed upon

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the various forts of flies: in fummer, they continually circle in fearch of the winged infects; and in winter they attack their chryfalids and pierce the horny thell.

The total length four inches and a half; the bill feven lines; the tail twenty lines, and projects fifteen lines beyond the wings. [A]

[A] Specific character of the Muscicapa Agilis . - " It is oliveff brown, below partly whitish; the quills of its wings and tail " black, and olive-brown at their margin,"

### .The STREAKED FLYCATCHER.

Le Gobe Mouche Tacheté de Cayenne, Buff. Muscicapa Variegata, Gmel.

### Eighteenth Species.

This Streaked Flycatcher is nearly of the same fize as the Active Flycatcher, which is also a native of Cayenne. Dirty white, with a cast of greenish on the wing, and some distincter foots of yellowish white, with ash-brown on the head and neck, and blackish cinereous on the wings, form the confused mottled plumage of - this bird. It has a small beard of whitish bristled feathers under the bill, and a half crest of ashcoloured feathers mixed with yellow filaments on the crown of the head. The billais of the fame fize as that of the preceding; and the tail

### THE STREAKED FLYCATCHER.

is of the fame length, but differs in its colours of the Active Flycatcher appears also more nicely formed, and more lively in its motions than the Streaked; at least as far as we can judge from the stuffed specimens.

#### The LITTLE BLACK AURORA FLY-CATCHER OF AMERICA.

Musicapa-Ruscilla, Linn. and Gmel.

Musicapa Amusicana, Briss.

The Black-headed Warbler, Lath. and Penn.

The Small American Redstart, Edw.

The Small Black and Orange-coloured Bird, Ray.

#### Nineteenth Species.

We thus mark the two conspicuous colours of the plumage of this bird, to which naturalists have hitherto given only the vague appellation of American Flycatcher. It is hardly fo large as the Yellow Wren. A bright black is spread over the head, the throat, the back, and the coverts; a beautiful yellow aurora is pencilled on the white gray of the stomach, and deepens under the wings; it also appears in streaks between the quills of the wings, and covers two-thirds. of those of the tail, both which are tipped with black, or blackish.—Such are the colours of the male. In the female the black is dilute blackish. and the orange and blush-colour yellow. Edwards gives figures of both male and female. Catefby

#### -442 LITTLE BLACK AURORA FLYCATCHER.

Catesby represents the bird also under the name of Small American Red-Start; but it is rather of a larger size, which would make us presume that it is a variety. [A]

[A] Specific character of the Muscicapa-Ruticilla: — "It is black; its break, a spot on its wings, and at the base of the tail-quills, yellow."

#### The ROUND-CRESTED FLYCATCHER.

Le Rubin, ou Gobc-Mouche Rouge Huppé de la Riviere des Amazones, Buff. Muscicapa Coronata, Gmel.

#### Twentieth Species.

Of all the numerous family of Flycatchers this is the most brilliant. Its slender delicate shape suits the lustre of its garb: a crest, confisting of small divided feathers of fine crimson, projects in rays on its head; the same colour appears under its bill, covers its throat, breaft, belly, and reaches the coverts of its tail; an ash-brown, intersected by some whitish waves on the edge of the coverts, and even of the quills, covers all the upper-part of the body and wings; the bill is very flat, and feven lines long; the tail two inches, and exceeds the wings by ten lines; the whole length of the bird is five inches and a half. Commerson calls it Cardinal. Titmoufe, though it is neither a Cardinal nor a Titmouse.

#### THE ROUND-CRESTED FLYCATCHER. 443

Titmouse\*. It would be one of the handsomest birds for the cage; but the nature of its food seems to place it beyond the dominion of man, and to ensure it liberty or death. [A]

\* We found the figure of these birds among the drawings brought by Commerson from the country of the Amazons. In Spanish it is called *Putillas*, as appears from a note at the bottom of the figure. The female, which is represented with the male, has no crest; all the beautiful tints of its plumage are fainter.

[A] Specific character of the Muscicapa Coronata: — " It is brown; the crest on its head roundish; its temples, and the under-side of its body, red."

#### The RUFOUS FLYCATCHER.

Le Gobe-Mouche de Cayenne, Buff. Muscicapa Rusescens, Gmel.

#### The Twenty-first Species.

This Flycatcher, which is five inches and a half long, is nearly of the fize of the Nightingale; all the upper-part of its body is of a fine light rufous, with a flame cast, which extends over the small quills of the wings; and these covering the great quills when the wings are closed, have only a small black triangle formed by their extremities; a brown spot covers the crown of the head; all the anterior and the upper-parts of the body, are tipt with some slight shades of rusous; the tail is square and spread; the bill is broad, short, and strong, and its point reslected, and partaking

epartaking therefore both of the Flycatchers and of the Tyrants. We are uncertain whether to refer it to Brisson's Rufous Flycatcher of Cayenne.—It is a discouraging circumstance that nomenclators have so often classed distinct objects by the same name: however, the Rusous Flycatcher of Cayenne, is, according to Briffon, eight inches long, and ours is only five; and the difference in regard to colour will appear from comparing his description with what we have given \*. But there is no effential distinction between them, except in regard to fize; and that difference cannot be imputed to age, for if the smaller were supposed to be the younger. the orange spot on the breast would be less vivid than in the adult. [A]

\*\*\* Above, tawny rufous; below, dilute rufous; its head, throat, and neck, deep cinereous; the feathers on its throat, and its lower-neck, edged with whitish; its breast, rump, and tail-quills, bright rufous." BRISSON.

[A] Specific character of the Muscicapa Rufescens:—"It is of a glossy! tawny; below white; its tail-quills black; a brown dash on its top."

#### The YELLOW-BELLIED FLYCATCHER.

Le Gobe-Mouche à Ventre Jaune, Buff. Muscicapa Cayenensis, Linn. Gmel. and Briss.

#### Twenty-second Species.

This beautiful Flycatcher inhabits the continent of America, and the adjacent islands. The

one figured in the Planches Enluminées was brought from Cayenne; we have received another from St. Domingo, under the name of Crested Flycatcher of St. Domingo. We are of opinion that these differ only by their sex: that of St. Domingo feems to be the male; for the golden yellow of its crown is more vivid and more spread than in the other, where the lighter tint scarce appears through the blackish feathers which cover that part of the head. other respects the two birds are similar. are rather smaller than the Nightingale, being five inches and eight lines long; the bill is eight lines, and scarcely curved at the tip, and the wings reach not to the middle; the orange fpot on the head is edged with a blackish ashcolour, a white bar croffes the face over the eyes, below which a fpot of the same colour appears that ipreads, and is lost in the rusty-brown of the back; this rufty-brown covers the wings and the tail, and becomes rather more dilute on the edge of the small webs of the quills; a fine orange-yellow covers the breast and the belly, which vivid colour distinguishes this bird from all the other Flycatchers. Though the golden yellow feathers of the crown can be erected at pleafure, as in the fmall European Wrens, yet, fince they are usually reclined, the bird is not properly a Crested Flycatcher. [A]

The

<sup>[</sup>A] Specific character of the Musiciana Cayenensis: — It is brown; below yellow; its eyebrows white; its top somewhat orange.'!

#### The KING OF THE FLYCATCHERS.

Le Roi des Gobe-Mouches, Buff,

#### Twenty-third Species.

This has been named The King of the Flycatchers, on account of a beautiful crown placed transversely on its head; whereas in all other birds the crests lie longitudinally. It consists of four or five rows of small round feathers, spread like a fan, ten lines broad, all of a bright bay colour, and terminated with a little black spangle; so that it might be taken for a peacock's tail in miniature.

This bird is also remarkably shaped, and seems to combine the features of the Flycatchers, of the Moucherolles, and of the Tyrants. It is scarcely larger than the European Flycatcher, and has a disproportioned bill, which is ten lines in length, and very broad and flat, befet with briftles that reach almost to its tip, which is hooked. The tarfus is short; the toes slender; the wing is not more than three inches, nor the tail more than two. It has a small white eye-brow; its throat is yellow; a blackish collar encircles its neck, and joins that tinge which covers the back, and changes on the wing into a deep fulvous brown. The quills of the tail are light bay; and the same colour, though more dilute, stains the rump and the belly; the whitish colour of the stomach is

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#### THE KING OF THE FLYCATCHERS. 447

crossed by small blackish waves.—This bird is very rare; only one specimen has been brought from Cayenne, where even it seldom appears.

#### The DWARFISH FLYCATCHERS.

Les Gobe-Moucherons, Buff.

Twenty-fourth and Twenty-fifth Species.

Nature has proportioned these birds to their feeble prey; a large American beetle might be a match for them.—We have specimens of them in the King's cabinet, and a short description will suffice.

The first \* is the smallest of the Flycatchers; it is less than the smallest of our Wrens, and in its figure, and even in its colours, it is nearly the same. Its plumage is olive, without any yellow on the head, but a few light shades of greenish appear on the lower-part of its back and on its belly; and small lines of yellowish white are traced on the blackish quills, and on the coverts of the wings.—It is found in the warm parts of America.

The fecond † is still smaller than the first; all the under-part of its body is light yellow, verg-

<sup>\*</sup> This is the Muscicapa Pygmeea of Gmelin, and the Dwarf i Flycatcher of Latham.

<sup>+</sup> This is the Muscicapa Minuta of Gmelin, and the Petty Fly-catcher of Latham.

ing on straw colour; it is hardly three inches long; its head, and the beginning of the neck, are partly yellow, partly black, each yellow feather having in its middle a black streak, which shews the two colours disposed in long and alternate spots; the feathers of the back, the wings, and their coverts, are black cincreous, and edged with greenish; the tail is very short, the wing still shorter; the bill is slender, and lengthened, which gives this little Flycatcher a peculiar appearance.

The useful destination of the Flycatchers will occur to the most superficial observer. insect tribes elude the interference of man; and though despicable as individuals, they often become formidable by their numbers. Instances are recorded of their multiplying to fuch an amazing degree as to darken the air; of their devouring the whole vegetable productions; and of their carrying in their train the accumulated ills of famine and pestilence. Happily for mankind fuch calamities are rare, and Nature has wifely provided the proper remedies. birds fearch for infects' eggs; many feed on their groveling larvæ; fome live upon their crustaceous crysalids; and the Flycatchers seize them after they escape from prison, exulting on their wings. Hence in autumn, when these birds migrate into other climates, the swarms of.

gnats, flies, and beetles, are in our latitudes more than usually numerous. But in the tropical countries, where heat and moisture conspire to ripen the exuberance of insect life, the Flycatchers are more essential. All Nature is balanced, and the circle of generation and destruction is perpetual! The philosopher contemplates with tender melancholy this cruel system of war; he strives in vain to reconcile it with his ideas of benevolence of intention: but he is forcibly struck with the nice adjustment of the various parts, their mutual connexion and subordination, and the unity of plan which pervades the whole.

#### The MOUCHEROLLES.

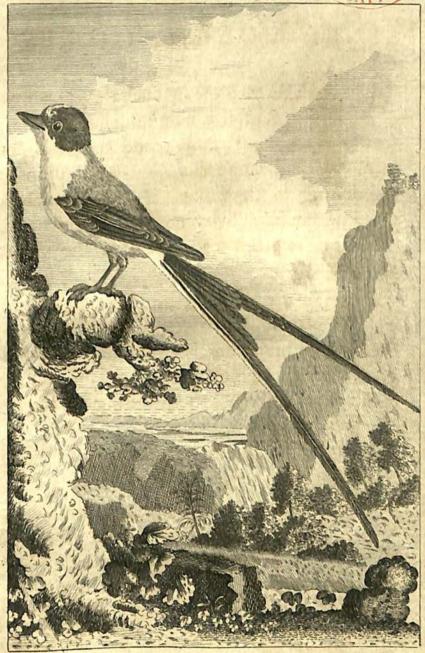
We shall term those Moucherolles which are larger than the common Flycatchers, but smaller than the Tyrants; and to avoid confusion, we shall range them in two divisions, corresponding to their size. As the Moucherolles are intermediate between the Flycatchers and the Tyrants, they participate of the nature of both.

They are found in both continents; but they are different species which occur in each. The ocean that intervenes between the tropics is the great barrier, which none but the palmipede birds, from their facility in resting on the water, can pass.

In the hot climates Nature sports in the luxuriance of her productions. Many species of birds, such as the Widow-birds, the Moucherolles, and the Bee-eaters, which inhabit those sultry regions, are surnished with tails of uncommon length: this character distinguishes the Moucherolles from the Flycatchers, from which they differ also in having their bill somewhat stronger, and more hooked at the tip.

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THE FORKED-TAIL FLY-CATCHER.

#### The SAVANA.

Le Savana, Buff.
Muscicapa-Tyrannus, Linn. and Griel.
The Fork-tail Flycatcher, Penn. and Lath.

#### First Species.

·This Moucherolle is nearly as large as the Tyrants, and is figured in the Planche Enluminées, under the appellation of Forked-tail Tyrant of Cayenne; it is diftinguished however by its bill, which is more flender and not fo much hooked as in the Tyrants. It is called the Widow Cayenne; but this name is appropriated to another kind of birds, which it refembles in nothing except the length of its tail. It constantly haunts the flooded savannas, and for that reason we have termed it the Savana. It is obferved to perch upon the adjacent trees, and to alight every minute upon the clods or graffy tufts which rife above the furface of the water. jerking its tail like the Wagtails. It is as large as the Crested Lark; the quills of its tail are black, the two outermost nine inches long, and forked, the two following only three inches and a half, and the rest gradually shorter, so that the two mid-ones are only an inch:—and thus, though the bird is fourteen inches long, meafuring from the point of the bill to the end of the tail, the distance between its bill and its nails

is only fix inches. On the crown of its head is a yellow fpot, which is however wanting in many subjects, these being probably semales. A short blackish square hood covers the back of its head; beyond that, the plumage is white, which colour advances under the bill, and spreads over all the anterior and under-part of the body; the back is greenish-gray, and the wing brown.—This bird is found on the banks of the river De la Plata, and in the woods of Montevideo, from whence it was brought by Commerson. [A]

[A] Specific character of the Muscicapa-Tyrannus: — A Its is very long and forked, its body black, below white. It is found as far north as Canada.

# The CRESTED MOUCHEROLLE, with Steel-coloured Head.

Muscichpa-Paradisi, Linn. and Ginel. The Pied Bird of Paradise, Edw. The Paradise Flycatcher, Lath.

Second Species.

This bird is found at the Cape of Good Hope, Senegal, and Madagascar. Brisson describes it in three different places of his ornithology, by the names of the Crested Flycatcher of the Cape of Good Hope\*, the White Flycatcher of the Cape

<sup>\*</sup> Crested Flycatcher; — "Above dilute scarlet, below white; the head and the upper-part of the neck greenish-black; the tail-quills dilute purple."

of Good Hope\*, and the Crested Flycatcher of Brazil †. These three are really the same, the sirst and third being males, and the second, which is rather larger, a semale; a property which, though principally consined to the birds of prey, obtains also in the Flycatcher, the Moucherolles, and the Tyrants.

The male is feven inches long, the female. eight inches and one-fourth; this excess being almost entirely in the tail; but its body is also somewhat thicker, and of the fize of a common Lark: in both, the head and the top of the neck are covered, as far as the circular division in the middle, with black, shining with a green or bluish gloss, whose lustre is like that of burnished steel: its head is decorated with a beautiful crest, which falls loosely back; its eyes are flame-coloured; its bill is ten lines in length, a little arched near the tip, reddift, and befet with pretty long briftles. All the rest of the body of the female is white, except the great quills, through which the black appears at the tips of the wings when closed; there are two rows of black streaks on the small quill-feathers and in the great coverts; and the shafts of the tail-quills are uniformly black throughout.

White Crested Flycatcher: — The head and upper-part of the neck greenish-black; the tail-quills white, their outer edges and shafts black."

<sup>†</sup> Crested Flycatcher: "Above dilute scarlet; below white; the head greenish-black; the superior coverts of the wings gold-coloured, the tail-quills dilute scarlet."

In the male, the breast, below the black hood, is bluish-gray, and the stomach and all the under-part of the body white: a bright bay robe covers all the upper-part to the end of the tail, which is oval shaped and regularly tapered, the two middle quills being the largest, and the others shortening two or three lines each: the same is the case in the semale.

According to Adanson\*, this Moucherolle lodges among the mangrove-trees, which grow in the folitary and unfrequented fpots along the banks of the Niger and of the Gambra. Seba places it in Brazil, and ranges it with the birds of Paradife, applying the Brazilian appellation Acamacu †; but little can be relied upon the accuracy of that collector of Natural History, who so often bestows names without discernment. It is very unlikely that this bird could be found both in Africa and Brazil; yet Briffon founds his . Claffification upon the authority of Sebasiatithe fame time that he expresses a suspicion, that Seba was mistaken. Klein supposes it to be a Crested Thrush ‡, and Moehring a Jackdaw |; --- a striking instance of the confusion bred by a rage for nomenclature. But we have still another: Linnæus imagines it to be a Raven; but as it has a long tail, he calls it the Paradise Raven §. [A]

<sup>\* \*</sup> Supplement de l'Encyclopedie, tome i.

<sup>†</sup> Brasilian Paradise-bird, or Crested Cuiriri Acamacu.

Turdus Cristatus. | Monedula. § Corvus Paradisi.

<sup>[</sup>A] Specific character of the Muscicapa Paradist: — "Its head crested and black; its body white; its tail wedge-shaped; its intermediate tail-quills longest."

#### The VIRGINIAN MOUCHEROLLE.

Muscicapa Carolinensis, Linn. and Gmel. The Cat Flycatcher, Penn. and Lath.

#### Third Species.

Catefby calls this the Cat-bird, because its cry resembles the mewing of a cat. It passes the fummer in Virginia, where it feeds upon infects; it does not perch on large trees, and frequents only the shrubs and bushes. It is a little larger. he tells us, than a Lark. Its fize is therefore nearly the same as that of the Little Tyrant; but the straightness of its bill distinguishes it from the Tyrants. The plumage is dark, beingvariously mixed with black and brown; the upper-fide of its head is black, and the upper-fide. of its body, of its wings, and of its tail, deep brown; an even blackish on the tail: its neck, its breast, and its belly are of a lighter brown; a dull red cast appears on the lower coverts of its tail, which is three inches long, and confifts of twelve equal quills, and only two-thirds of it covered by the wings; the bill is ten lines and a half, and the whole length of the bird is eight inches. -It breeds in Virginia, and lays blue eggs; it migrates on the approach of winter. [A]

<sup>[</sup>A] Specific character of the Cat Flycatcher, Muscicapa Carolinens, Linn.: — "It is brown, below cinereous, its head black, its vent red." It builds its nest with leaves and rulhes, and lines it with sibrous roots. It is very courageous, and will attack a crow.

## The BROWN MOUCHEROLLE of MARTINICO.

Muscicapa Martinica, Gmel. Muscicapa Martinicana Cristata, Brist,

#### Fourth Species.

This Moucherolle has not a long tail like the preceding kinds; in its fize and figure it refembles the largest of the Flycatchers. It is distinguished from the Tyrants by the shape of its bill, which is not so much hooked as the bill of the smallest Tyrants, and more slender; it is however eight lines long, and the bird itself six inches and a half. A deep brown of a pretty uniform tinge covers the upper-part of the body, the head, the wings, and the tail; the under surface of the body is undulated with transverse waves of rusous brown; a few reddish feathers form the inferior coverts of the tail, which is square, and the edges of its outer-quills are fringed with white lines. [A]

[A] Specific character of the Musicapa Martinica: — "Ità m head is crested, its body brown, below cinereous, the outer margin of its wing-quills whitish."

# The FORKED-TAIL MOUCHEROLLE of MEXICO, Buff.

Muscicapa Forficata, Gmel. The Swallow-tailed Flycatcher, Lath.

#### Fifth Species.

It is larger than the Lark; its whole length is ten inches, of which its tail measures five; its eyes are red, its bill eight lines long, flat, and rather flender: its head and back are covered with a very light gray, mixed with a dilute reddish; the red colour below the wings extends also on the sides, and tinges the white that is spread over the whole of the under-fide of the body; the small coverts are ash-coloured, and edged with scaly white lines; the great coverts, which are blackish, are similarly fringed; the great quills of the wings are entirely black, and furrounded with rufty-gray: the outermost quills of the tail are the longest, and are forked like the Swallow's tail; the other quills diverge less, and gradually shorten; so that the middle one is only two inches long: they are all of a gloffy black, and fringed with rufty-gray: the outer webs of the largest quills on each side appear white almost their whole length. Some specimens have the tail longer than that fent from Mexico by M. de Boynes, then Secretary for the Marine Department.

The

#### The MOUCHEROLLE of the PHILIPPINES.

Muscicapa Philippensis, Gmel.

#### Sixth Species.

It is as large as the Nightingale; all the upperpart of its body is brown-gray; all the underpart of the wings and tail are whitish from below the bill; a white line stretches over the eyes, and long diverging hairs appear at the corners of the bill. Such are the obscure ambiguous seatures of this bird. A specimen is lodged in the King's Cabinet.

# The GREEN-CRESTED VIRGINIAN MOUCHEROLLE, Buff.

Muscicapa Crinita, Linn and Gmel.
The Crested Flycatcher, Penn. Cat. and Lath.

#### . Seventh Species.

The length of the tail and bill of this bird marks its relation to the Moucherolles: it is rather larger than the Flycatchers, being eight inches long, of which its tail forms the half; its bill is flat, befet with briftles, and scarcely hooked at the tip, and it measures twelve lines and a half; the head is furnished with small

fmall feathers reclined into a half-crest; the top of the neck, and all the back, dull green; the breast and the fore-part of the neck leaden-gray; the belly of a fine yellow; the wings brown, and so are the great quills which are edged with bay; those of the tail are the same. This bird is not shaped like the Tyrants, but appears to partake of their gloomy sullen temper. It would seem, says Catesby, from its disagreeable screams; to be always in enmity, and continually at variance with the other birds. It breeds in Carolina and Virginia, and before winter it removes to hotter climates. [A]

[A] Specific character of the Crested Flycatcher, Muscicapa Crinita: — "Its head is crested, its neck bluish, its belly yel"lowish, its back greenish, and the quills of its wings and tail
"rusous." It builds its nest in the holes of trees, employing for the materials, hair and snakes skins.

#### The SCHET of MADAGASCAR.

Muscicapa Mutata, Linn. and Gmel. The Mutable Flycatcher, Lath.

#### Eighth Species.

The name Schet is applied in Madagascar to a beautiful long-tailed Moucherolle; and two others are called Schet-all, and Schet-Vouloulou, which seem to denote the Rusous Schet and the Variegated Schet, and mark only two varieties of the same species. Brisson reckons three; but a sew differences

differences in the colours are not sufficient to constitute distinct species, where the shape, the size, and all the other proportions, are the same.

The Schets have the long form of the Wagtail; they are rather larger, measuring fix inches and a half to the end of the true tail, not to mention two feathers which extend almost five inches farther; the bill is seven lines, triangular, very flat, broad at the base, beset with bristles at the corners, and with hardly any perceptible curve at the point: a beautiful blackish-green crest, with the lustre of burnished steel, is bent smooth back, and covers the head; the iris is yellow, and the eye-lid blue.

In the first variety, the same dark colour that paints the crest, encircles the neck, and invests the back, the great quills of the wings and of the tail, of which the two long feathers measure seven inches, and are white, as are also the small quills of the wings, and all the underpart of the body.

In the Schet-all, the colour of the crest appears only on the great quills of the wings, whiche coverts are marked with broad white lines; all the rest of the plumage is a bright gilded bay, which Edwards terms a fine shining cinhamon, which is spread equally over the tail and the two long projecting shafts; these shafts are similar to those which are sent off from the tail in the Angola and Abyssinian Rollers, only

in these birds they are the outermost, while in the Madagascar Moucherolle they occupy the middle.

The third variety, or the Schet-Vouloulou, has fcarcely any difference from the preceding, except that the two projecting feathers of the tail are whitish; the rest of the plumage is bay-coloured, as in the Schet-all.

In the Schet-all which is preserved in the King's Cabinet, these two feathers are six inches long; in another specimen, I sound them to be eight inches, and the outer webs edged with black three-sourths of their length, and the remainder white; in a third, these two long seathers were entirely wanting; whether we must impute this to some accident, to the age, or to the moulting, which Edwards thinks lasts six months in these birds \*?

They are found not only in Madagascar, but in Ceylon, and at the Cape of Good Hope. Knox gives a good description of them †.

Edwards

<sup>&</sup>quot;I received this bird (the Schet-all) from Ceylon. M. Briffon fays, that it comes from the Cape of Good Hope; but the figure which he gives of it is furely imperfect, as it has not the two feathers of the tail, which are fo remarkably large. I believe it is natural to fome birds which have these long tails, to want them fix months in the year... which I have feen in some long-tailed birds at London,... The White Crested Flycatcher described by Brisson, is certainly the male of the same species."

GLEANINGS.

<sup>† &</sup>quot;They are small birds, not much exceeding Sparrows; charming to the eye, but good for nothing else. Some of these birds have their bodies as white as snow, the quills of their tail a

#### 462 THE SCHET OF MADAGASCAR.

Edwards calls the third Schet-all the Pied Bird of Paradise; however, Schets are totally different from the Birds of Paradise.

foot long, and their heads black like jet, with a tuft or creft. There are many others of the same kind, the only difference confishing in the colour, which is reddish-orange: these birds have also a tust of black seathers erect on the head. I believe the one fort are the males, and the others the semales of the same species."

Hift. of Ceylon, by Robert Knox, London, 1681.

### The TYRANTS.

The appellation of Tyrant applied to these birds must appear whimsical. According to Belon, the ancients termed the Little Crowned Wren Tyrannus\*: in the present case, the name refers not only to this crown, but also to their sanguinary disposition. A sad proof of human misery, that the idea of cruelty is ever conjoined with the emblem of power! We should therefore have changed this mortifying and absurd term, but we found it too firmly established by naturalists:—It is not the first time that we have been compelled by the general usage to acquiesce in improper and incongruous epithets.

These inhabitants of the New World are larger than the Flycatchers or Moucherolles; they are stronger and more vicious; their bill is larger and sirmer; their dispositions are darker and more audacious, and, in this respect, they resemble the Shrikes, to which they are analogous also in the size of their body and the shape of their bill.

<sup>\*</sup> This word, in Greek, figuifies merely a king or prince.

### The TITIRI, or PIPIRI.

Lanius-Tyrannus, Linn, Gmel. and Boronsk, Muscicapa Tyrannus, Briss. Pica Americana Cristata, Frisch. Turdus Corona Rubra, Klein. The Tyrant Shrike, Lath.

#### The First and Second Species.

Tr has the fize and strength of the Great Cinereous Shrike; it is eight inches long, thirteen inches of alar extent; its bill flat, but thick, and thirteen lines long, briftled with mustachoes, and straight to the tip, where it is hooked: its tongue is acute and cartilaginous; the feathers on the crown of its head are yellow at the root, and terminated with a blackish speckling, which covers the rest when they are flat, but, when the bird swells with rage, they become erect, and the head then appears crowned with a broad tuft of the most beautiful yellow; a light browngray covers the back, and on the fides of the neck it melts to the white flate-gray of the anterior and under-part of the body: the brown quills of the wing and of the tail are edged with a rufty thread.

The female has the yellow spot on the head though not so broad, and its colours are more dilute, or duller than those of the male. A female, measured at St. Domingo by the Chevalier.

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THE GRAND TYRANT.

Deshayes, was an inch longer than the male, and its other dimensions in proportion: hence, in general, the smallest individuals in this species are the males \*.

At Cayenne, this Tyrant is called *Titiri*, from the resemblance to its shrill noisy screams. The male and semale keep commonly together in the cleared spots of the forests; they perch on the losty trees; and are very numerous in Guiana. They breed in the hollow trunks, or in the clests of the branches below the shade of the most leasy bough. If one attempts to plunder their young, their natural audacity changes into intrepid sury; they contend obstinately; they dart upon the person; pursue him; and if, in spite of all their exertions, they are unable to rescue their dear offspring, they fondly visit the cage, and carry food.

This bird, though small, appears to dread no fort of animal. "Instead of sleeing, like the other birds," says Deshayes, " or concealing itself from the rapacious tribes, it attacks them with intrepidity, and harasses them to such a degree, that it generally succeeds in driving them off. No animal dares to come near the

<sup>\* &</sup>quot;All the Pipiris are not exactly of the same fize or of the same plumage; besides the difference remarked in all the kinds between the male and the semale, there is still another with respect to the bulk of individuals in this species. This difference is often perceived, and strikes even the most careless observers. Probably the abundance or searcity of proper sood is the cause of the diversity." Note communicated by the Chevalier Deshaves.

tree where it breeds. It pursues to a considerable distance, and with implacable obstinacy, all that it conceives to be its enemies, dogs especially, and birds of prey \*." It is not even intimidated at man; so lately has his empire been established in those savage countries, that it seems not conscious of his power †. In the moments of its sury it shuts its bill forcibly, which occasions a quick repeated cracking.

In St. Domingo this bird is named Pipiri, which, as well as Titiri, expresses its usual cry or fquall. It is distinguished into two varieties, or two contiguous species: the first is the Great Pipiri, of which we have just spoken, and which is called in that country The Black-headed Pipiri, or The Thick-billed Pipiri; the other is called. The Yellow-headed Pipiri, or The Migratory Pipiri, and is smaller and weaker. The upperpart of the body in the last is gray, fringed throughout with white; but in the Great Pipiri it is fringed with rufous. The disposition of the fmall Pipiris is also much milder, and not so favage as the others. These remain sequestered in the wilderness, and are never met with except in pairs; while the small Pipiris appear often in troops, and come near the fettlements.

<sup>\*</sup> M. Deshayes.

I shot a young one, which was only slightly wounded. My little negro who ran after it was attacked by a Shrike of the same species, which was probably the mother: this bird fixed with such rancour on the boy's head, that he had the uniost difficulty get ril of it." Note communicated by M. de Manoncour.

They affemble in confiderable flocks during the month of August, and haunt those places which vield certain kinds of berries that attract the beetles and infects. At that time these birds are very fat, and are caught for the table \*.

Though they are called Migratory Pipiris, it is not probable, fays Deshayes, that they ever quit the island of St. Domingo, which is of sufficient extent to admit local changes. they leave their usual haunts in certain seasons, and follow the maturity of the fruits which feed their infect prey. All their other habits are the same as those of the Great Pipiris: both species are very numerous in St. Domingo, and few birds occur in more frequency †.

They live upon caterpillars, beetles, butterflies, and wasps. They perch on the highest fummit of trees, and especially on the palms, from thence they descry the insect as it roves in the air, and the instant that they seize it they return again to their bough. They feem most engaged from feven in the morning till ten;

M. Deshayes.

They are seen in the forests, in the abandoned grounds, in the cultivated spots; they like every situation; yet the species of the Yellow-headed Pipiris, which are the most numerous, seem to prefer the fettled parts. In winter they come near the houses; and as this feason from the mildness of the climate corresponds to the spring in France, it seems that the coolness which then prevails inspires them with cheerfulness. Never are they seen so noify, or so joyous, as in the months of November and December. They frolic with each other, toy, and carefs." Note communicated by M. Deshayes.

and again from four o'clock in the afternoon till fix. It is amusing to see them hunting their fugacious prey, and pursuing their devious course; but their losty conspicuous station exposes them perpetually to the eye of the fowler.

No birds are so early awake as the Pipiris; they are heard at the first appearance of dawn\*; they pass the night on the summits of the tallest trees, and hail the approach of the morning. There is no stated season for their amours †. They breed, says M. Deshayes, in the heats of autumn, and during the freshening air of winter, at St. Domingo, though spring is the most usual season; they lay two or three eggs, sometimes four, which are whitish, and spotted with brown. Barrere reckons this bird a Bee-eater, and terms it Petit-ric. [A]

<sup>\* &</sup>quot;Except the Cock, the Peacock, and the Nightingale, which fing during the night, no bird is so early." Note communicated by M. Fresnaye, formerly Counseller at Port-au-Prince.

<sup>† &</sup>quot;The Black-headed Pipiris lay most undoubtedly in December. We cannot assirm whether each semale breeds every year; nor whether these winter hatches, which seem extraordinary, be not occasioned by accidents, and destined to repair the loss of hatches made in the proper season." Note communicated by M. Deshayes.

<sup>[</sup>A] Specific character of the Lanius-Tyrannus: It is cinereous; below white; its top black; a longitudinal streak, fulvous.

#### The TYRANT OF CAROLINA.

Lanius-Tyrannus, var. 3. Linn. and Gmel.

#### Third Species.

From the account which Catesby has given of this bird, we do not hesitate to class it with the Pipiri of St. Domingo, since its disposition and its habits are the same \*. But it is distinguished by its red crown, and the manner of placing its nest, which is lest entirely exposed in the shrubs or bushes; whereas the Pipiri conceals its nest, or even lodges it in the holes of trees. It is nearly of the same size as the Great Pipiri: its bill seems less hooked: Catesby says only that it is broad, slat, and tapering. The red

<sup>\* &</sup>quot;The courage of this little bird is fingular. He pursues and - puts to flight all kinds of birds that come near his station, from the smallest to the largest, none escaping his fury; nor did I ever see Tany that dared to oppose him while flying, for he does not offer to attack them when fitting. I have seen one of them fix on the back of an Eagle, and perfecute him to that he has turned on his back into various postures in the air, in order to get rid of him; and at Tall was forced to alight on the top of the next tree, from whence he dared not to move till the little Tyrant was tired, or thought fit · to leave him. - This is the constant practice of the cock, while the hen is breeding; he fits on the top of a bush, or small tree not far from her nest, near which if any small birds approach, he drives them away; but the great ones, as Crows, Hawks, Eagles, he will not fuffer to come within a quarter of a mile of him without attacking them. They have only a chattering note, which they utter with great vehemence all the time they are fighting. - When their young are flown they are as peaceable as other birds." CATESBY.

fpot on the upper-part of its head is very brilliant, and is encircled with black feathers, which conceal it when they are closed.—This bird appears in Virginia and Carolina about the month of April; there breeds, and departs in the beginning of winter.

A bird fent to the King's cabinet, under the name of Louisiana Tyrant, appears to be exactly the fame with the Carolina Tyrant of Catefby. It is larger than the fifth species, or Cayenne Tyrant, and almost equal to the Great Pipiri of St. Domingo. An ash-colour, almost black, is fpread over all the upper-part of the body, from the crown of the head to the end of the tail, which terminates in a fmall white bar shaped into festoons; light whitish waves are intermixed in the small quills of the wing; some fmall streaks of deep orange, inclined to red, shine through the blackish quills on the top of the head; the throat is of a pretty pure white, which is shaded with black on the breast, and again becomes fnowy from the flomach as far, as the tail. [A]

<sup>[</sup>A] The Carolina Tyrant builds its nest with wool and moss, and lines it with sibrous roots. It lays five eggs, which are white, with rusty spots.

### The BENTAVEO, for The CUIRIRI.

Lanius-Pitangua, Linn. and Gmel. Pitangua-guacu, Ray and Will. Tyrannus Brasiliensis, Briss.
The Brasilian Shrike, Lath.

Fourth Species.

This Tyrant, called Bentaveo at Buenos-Ayres, whence it was brought by Commerson, and Pitangua-guacu by the people of Brazil, has been described by Marcgrave\*. He makes it of the size of the Stare (we will observe that it is thicker, and more bulky); and represents its bill as thick, broad, and pyramidal, its edges sharp, and more than an inch long; its head bulky; its neck short; the head, the top of its neck, the whole of its back, its wings, and its tail, of a blackish brown, slightly shaded with dull green;

\* "The Pitangua-guacu of the Brazilians, Bemtere of the Portuguese, is equal in bulk to the Stare; has a bill thick, broad, pyramidal, somewhat more than an inch long, sharpened exteriorly; its head compressed, and broadish; its neck short, which it contracts when fitting. Its body is nearly two inches and a half long; itstail broadish, and three inches long; its legs and feet are brown. Its head, the upper-part of its neck, the whole of its back, its wings, and its tail, are of a blackish brown, mixed with a very little The lower-part of its neck, its breast, and its lowerbelly, have yellow feathers; the upper-part, however, near the head, has a little crown of white. From below the throat to the origin of the bill is white. It calls with a loud voice. these birds have a yellow spot on the top of the head; some have it partly yellow; they are called by the Brazilians, Cuiriri. every other respect they are like the Pitangua-Guacu." MARC-GRAVE.

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its throat white, and also the little bar on the eye; the breast and bely yellow; and the small quills of the wings fringed with rusty colour. Marcgrave adds, that some of these birds have an orange spot on the crown of the head, and others a yellow one. The Brazilians call these Cuiriri; and in every other property they are similar to the Pitangua-guacu. Seba applies the name Cuiriri to a species entirely different.

Thus the Bentaveo of Buenos-Ayres and the Pitangua and Cuiriri of Brazil are the fame; and in their inftincts similar to the Great Pipiri of St. Domingo, or the Titiri of Cayenne: but the colours of the Bentaveo, its bulk, and the thickness of its bill, the most obviously distinguish it. [A]

[A] Specific character of the Lanius-Pitangua:—"It is black; below white; a yellow fireak on its top; a white belt on its eyes."

#### The CAYENNE TYRANT.

Muscicapa Ferox, Gmel. Tyrannus Cayannensis, Briss. The Tyrant Flycatcher, Lath, .

#### Fifth Species. .

It is larger than the Red-backed Shrike of Europe. In the specimen belonging to the King's cabinet all the upper-part of the body is ashirgray, deepening into black on the wings, of which which some quills have a light white border; the tail is of the same ark cast, and is pretty broad, and three inches long; the whole bird measures seven inches, and the bill ten lines; a lighter gray covers the throat, and receives a greenish tinge on the breast; the bill is of a straw, or light sulphur colour; the small feathers on the top, and anterior part of the head, are half erect, and are painted with some strokes of citron-yellow and aurora-yellow; the bill is slat, beset with bristles, and hooked at the point. The semale is not of so deep a brown.

The Little Cayenne Tyrant of the *Planches Enluminées* is rather smaller than the preceding, and only a variety of it. The one described by Brisson is also a variety. [A]

[A] Specific character of the Muscicapa Ferox:—"It is brown; its chin, its throat, and its breast, cinereous; its belly yellowish; the greater quills of its wings olive at their margin."

#### The CAUDEC.

Muscicapa Audax, Gmel. The Yellow-crowned Flycatcher, Lath.

#### Sixth Species.

This is the Spotted Flycatcher of Cayenne, as represented in the Planches Enluminées; but the hooked form of its bill, its strength, its size, and its disposition, entitle it to the name of Tyrant.

It is called *Caudec* at Cayenne, and is eight inches long; the bill a scalloped at the edges near the hooked point, is beset with bristles, and is thirteen lines long. Dark gray and white, intermixed with some rusty lines on the wings, compose its varied plumage; white predominates on the under furface of the body, where it is sprinkled with long blackish spots; the blackish, on the other hand, is the prevailing colour on the back, where the white forms only fome edgings. Two white lines run obliquely, the one over the eyes, the other below them; small blackish feathers half conceal the yellow fpot on the crown of the head. The feathers of the tail, which are black in the middle, have broad borders of rufous; the hind nail is the strongest of all.—The Caudec haunts the creeks, and perches on the low branches of trees, feeding probably upon aquatic infects. It is left frequent than the Titiri, but has the same audacity and cruelty. In the female, the yellow fpot is wanting on the head; and in some males that fpot is orange, a difference which is perhaps owing to the age.

### The TYRANT Of LOUISIANA.

Muscicapa Ludoviciana, Gmel.

### Seventh Species.

This bird was sent from Louisiana to the Royal cabinet, under the name of Flycatcher, but ought to be ranged with the Trants. It is as large as the Red-backed Shrike; its bill is long, flat, beset with bristles, and hooked; its plumage is gray-brown on the head and back, light slate-colour on the throat, yellowish on the belly, and light rusous on the great coverts; its wings cover only the third part of its tail, which is a brown ash-colour, shaded with a little rusous from the wings. We are unacquainted with its instincts, but these features sufficiently characterize it; and as it has the strength of the Pipiris, it probably has also their habits. [A]

<sup>[</sup>A] Specific character of the Muscicapa Ludoviciana:—" It is brown-cinereous; below yellowish; its throat flate-colour; the quills of its wings, and the edges of those of its tail, rusous."

### BI R D S

RELATED TO THE FLYCATCHERS, THE MOUCHEROLLES, AND THE TYRANTS.

## The KINKI-MANOU of MADAGASCAR.

Muscicapa Cana, Gmel.
Muscicapa Madagascarensis Ginerca Major, Briss.
The Ash-coloured Flycatcher, Lath.

HIS bird is distinguished from the Flycatchers by its fize, being almost as large as a Shrike; but it refembles them in many other characters; though a contiguous species, therefore, it cannot be included among them, but evinces that our artificial divisions correspondnot to the discriminating lines traced by Nature. The Kinki-Manou is eight inches and a half long, and is bulky; its head is black; and that colour extends like a round hood on the top of its neck and under its bill; the upper-part of its body is cinereous, and the under-part ashblue; the bill is flightly hooked at the tip, and not so strong as that of the Shrike, nor even so strong as that of the Little Tyrant; a few short briftles rife from the corner of the bill; the legs are of a lead colour, and thick and strong.

The

# The RED FL CATCHER.

I am of opinion that the Red Flycatcher of Catesby, and the Red Carolina Flycatcher of Brisfon, cannot be referred to the genus of the Flycatchers, or that of the Moucherolles; for though its fize, the length of its tail, and even its mode of life, feem to be analogous, its bill is thick, large, and yellowish, which rather points its relation to the Yellow Bunting. We shall therefore regard it as an anomalous species. It is thus described by Catesby: " It is about the bulk of " a Sparrow; it has large black eyes; its bill " is thick, strong, and yellowish: the whole of "the bird is of a fine red, except the inner " fringes of the wing-quills, which are brown; but those fringes are not seen unless the wings " are spread: it is a bird of passage, and leaves Carolina and Virginia in the winter; the fe-" male is brown, with a yellow shade." Edwards also describes it, and admits, that it has the bill of the granivorous class, only longer. I think adds he, that Catesby found that these birds feed upon flies, fince he gives the Latin appellation of Muscicapa Rubra.

#### The DKONGO.

Lanius Forficatus, Gmel.

Muscicapa Madagascarensts Nigra Major Cristata, Briss.

The Fork-tailed Shrike, Lath.

Though nomenclators have classed this bird with the Flycatchers, it appears to differ widely both from these, and from the Moucherolles; we have therefore separated it entirely, and assigned it the name of Drongo, which it receives in Madagascar. Its characters are: 1. Its bulk, being larger than the Blackbird, and thicker: 2. The tuft on the origin of the bill: 3. Its bill is not so flat: 4. The tarsus and toes are very strong. All its plumage is black, varying with green; directly under the root of the uppermandible fome long and very narrow feathers rife erect to the height of an inch and eight lines; they bend forward, and make a very odd fort of crest; the two outer-quills of the tail project an inch and feven lines beyond the two middle ones; the others are of an intermediate. length, and diverge, which occasions the tail to be very forked. Commerson assures us, that the Drongo has a pleasant warble, which he compares to the fong of the Nightingale; and this makes a wide difference from the Tyrants, which have all shrill cries, and are besides natives of America. This Drongo was first brought from Madagascar 7

Madagascar by Poivre; it has also come from the Cape of Good Hope, and from China. We have remarked that the crest is wanting in some specimens, and we have no doubt that the bird sent to the Royal cabinet under the name of the Forked-tail Flycatcher of China, belongs to this species, and is perhaps a semale; the resemblance, if we except the crest, being entire between this Chinese bird and the Drongo.

There is also a kind of Drongo found on the Malabar coast, whence it was sent by Sonnerat: it is rather larger than that of Madagascar, or that of China; its plumage is wholly black, but its bill is stronger and thicker; it has not the crest; and what the most distinguishes it are, the two long shafts which project from the ends of the two outer-quills of the tail; they are almost bare for six inches of their length, and have webs near their extremities as at their origin. We are unacquainted with the habits of this birdeof Malabar; but they are probably the same as those of the Drongo of Madagascar, since the external characters are alike in both. [A]

<sup>[</sup>A] Specific character of the Lanius Forficatus 3-4 Its tail is forked; it has an erect crest on its front; its body is greenish-black."

# The PIAUIIAU, Buff.

Muscicapa Rubrice. Vie, Gmel.

Muscicapa Cayanensis Nigra Major, Briss.

The Purple-throated Flycatcher, Lath.

The Piauhau is larger than any of the Tyrants, and is therefore excluded from the Flycatchers; indeed, except in its bill, it bears not the least analogy to these, and sceme to occupy a detached place in the order of Nature.

It is eleven inches long, and is larger than the Missel Thrush. All its plumage is deep black, except a deep purple spot that covers the throat in the male, but is wanting in the semale; the wings, when closed, extend as far as the end of the tail; the bill is sixteen lines long, and eight broad at the base, very slat, and shaped almost like an isosceles triangle, with a small hook at the point.

These birds move in flocks, and commonly precede the Toucans, and always uttering the shrill cry pibaubau: it is said that they feed upon fruits like the Toucans; but probably they also eat the winged insects, for the catching of which Nature seems to have fashioned their bill. They are very lively, and almost in continual motion. They reside only in the woods like the Toucans, and generally haunt the same spots.

Briffon

#### THE PIAUHAU. C 1148i

Brisson asks if the Jacapu of Marcgrave be not the same with the Piauhau \*? We may answer that it is not. The Jacapu of Marcgrave has indeed a black plumage, with only a purple, or rather a red spot under its throat; but at the same time, its tail is long, its wing is short, and its size is that of a Lark; these characters do not apply to the Piauhau. [A]

Thus the Kinki-Manou and the Drongo of Madagascar, the Red Flycatcher of Virginia and the Piahau of Cayenne, are all contiguous species, but essentially different from those of the Flycatchers, the *Moucherolles*, and the Tyrants.

\* "Jacupu, a bird of the bulk of a Lark; its tail extended; its legs short and black; its nails sharp on the four toes; its bill somewhat curved and black, half an inch long; its whole body is clothed with black shining seathers; but under the throat, spots of vermilion are mixed with this black."

[A] Specific character of the Muscicapa Rubricollis:—" It is black, a great space on its chin and throat red."

END OF THE POURTH VOLUME.



