

species in which there are no differentiating characteristics in the corresponding females.

Phlegænas johannæ rests on a female collected by Lieut. Richards. On examining the specimens in the British Museum and in the collection of Capt. Wardlaw-Ramsay, I find that a mistake has been made with some of the British-Museum specimens, and that a bird labelled *P. johannæ* must belong to *P. margarethæ*. Possibly, therefore, the *Phlegænas* of the Solomons may be another species of which we have not yet obtained the male.

Though Mr. Ramsay gives *Chalcophaps chrysoclora* as from the Solomons, based on a female specimen, yet I have ventured to doubt the identification, believing that it will be found to be *C. stephani*, which is the indigenous species of the neighbouring islands.

XI.—*Notes on a 'Catalogue of the Accipitres in the British Museum' by R. Bowdler Sharpe (1874). By J. H. GURNEY.*

[Continued from 'The Ibis,' 1881, p. 567.]

I HAVE now to refer to the two species which constitute the subgenus *Erythropus*, and which seem to me to form a distinct natural group intermediate between the true Kestrels and the Hobbies.

The two species of *Erythropus* are both of them gregarious and migratory; but their ordinary geographical ranges, except perhaps in South-west Africa, are very distinct.

The western species, *E. vespertinus*, is an inhabitant, during the summer months, of Europe and Western Asia, arriving in the spring, and migrating in the autumn to Africa; it has, however, been recorded as also nesting in Algeria*.

Mr. Sharpe, in his summary of the habitat of this species, does not refer to its occurrence either in Northern Europe or in Asia; but examples from Archangel are preserved in the British Museum (as noted by Mr. Sharpe in his list of the

* Loche, Expl. de l'Algérie, Ois., vol. i. p. 70.

specimens in that collection), and its appearance as a summer visitant in Finland was recorded by Malmgren in 'The Ibis' for 1870, p. 149. In Asia it has been obtained in Siberia as far to the north-east as Krasnoyarsk, in the valley of the Yenesay*; whilst further to the south the most easterly locality for it with which I am acquainted is North-western Turkestan, where it has been recorded by Severtzoff as occurring "during passage" †.

The southward autumnal migration of this species extends in Eastern Africa to Sennaar, where it was observed by Heuglin ‡, and on the western side of the continent to a much more southern latitude, as, according to Andersson, "it usually arrives in Damara Land and Great Namaqua Land about the rainy season, and again retires northward upon the approach of the dry season" §.

I may here mention, in passing, that I have found amongst Mr. Andersson's papers the following interesting memorandum of measurements of this species, in inches and lines, taken by him (in all cases, I believe) from birds in the flesh :—

		Entire length.	Wing.		Tail.		Tarsus.	
		in. lin.	in.	lin.	in.	lin.	in.	lin.
17 males	11 2	8	10	5	1½	1	1½
		to	to		to		to	
		11 11	9	9	5	7	1	3
5 females	11 4	8	11	5	5	1	2
		to	to		to		to	
		12 4	10	0	5	8½	1	3

In 'The Ibis' for 1876, p. 132, Mr. Buckley records having seen, in November, "an enormous quantity of Hobbies, apparently of this species, at Holtfontein, in the west of the Transvaal;" but as all the specimens of *Erythropus* which I have seen from Transvaal are referable to the eastern species, *E. amurensis*, and as Mr. Buckley does

* Ibis, 1880, p. 179.

† Ibis, 1875, p. 109.

‡ Ibis, 1861, p. 72, and Orn. Nordost-Afr. vol. i. p. 39.

§ 'Birds of Damara Land,' p. 15. Mr. Andersson considered that the "rainy season" in Damara Land commences towards the end of October.

not speak of having obtained one of those which he saw, it is possible that the flock which he met with may have belonged to the eastern form.

There appears to be some doubt as to whether Radde's name of "*amurensis*," which is in use to designate the eastern *Erythropus*, is in reality the oldest specific title for this species. Prof. Newton has kindly called my attention to a rare work by J. P. Falk, who was Professor of Botany at St. Petersburg in the latter half of the last century*, in which the name of "*Falco vespertinoides*" is given to a Falcon the description of which may be intended to represent a nearly adult male of *E. amurensis*, more particularly as the underside of the wings is described as "nearly white;" but, on the other hand, the habitat which Falk gives for his *Falco vespertinoides*—"Bashkiria, Perm, and the Province of Isett"—is very far to the west of any locality, except in South Africa, where *E. amurensis* has been met with by subsequent observers; and I may add that I have seen a nearly adult male of *E. vespertinus*, killed at Malta in May, and now in the collection of Mr. Dresser, in which a considerable proportion of white is apparent on the under wing-coverts, mingled with the brown of the immature and the slate-colour of the adult plumage†.

Japan must be added to the localities for *E. amurensis* quoted by Mr. Sharpe. Conf. Ibis, 1875, p. 448, where a specimen obtained there in August is recorded; also Ibis, 1878, p. 249.

With regard to the distribution of this species in Eastern Asia, Radde records its occurrence in the month of June near the source of the Osega river‡; and a more recent notice of its distribution in Siberia has been given by

* Falk's work, which was published posthumously in St. Petersburg in 1786, is entitled 'Beyträge zur topographischen Kenntniss des Russischen Reichs;' and the description of his "*Falco vespertinoides*" will be found in vol. iii. p. 329.

† Some mingling of white, though not quite so much as in the specimen referred to, is usually perceptible on the under wing-coverts of immature males of *E. vespertinus*.

‡ Reis. Sibir. vol. ii. p. 102.

M. Taczanowski in the Bull. Soc. Zool. de France for 1876, p. 126, in a paragraph of which the following is a translation:—"Dybowski, in furnishing an adult male from Akscha, in Dauria, and subsequently several females from Old-Tsuruchaitui, on the Argun, has considerably extended the westward limit of the habitat of this bird." Col. Prjevalsky includes it among the birds of Mongolia, where, he states, it arrives about the end of March, and breeds, but is less abundant than it is in China*. M. David states that it arrives on the plains of China and Mongolia in April, and leaves in a south-easterly direction in autumn†; he records meeting with specimens near Sinsiang-chién, between lat. 35° and 36°, as late as the 18th of October‡; but he did not observe it in Southern China. The readers of 'The Ibis' will remember that the late Mr. Swinhoe found this species nesting near the coast of Northern China, at Talien Bay and Chefoo§, the fledged nestling figured in 'The Ibis' for 1868, pl. ii., having been taken in the month of July.

From the observations of Mr. Inglis we learn that in North-eastern Cachar "these little Falcons appear regularly about the middle of October in hundreds," but mostly disappear "about the middle of December." It would seem, however, that they again visit Cachar during their northward vernal migration, as Mr. Inglis obtained an adult male in February and a young male (which appears, by the description given of it, to have been a bird about a year old) as late as May||.

Further south this species has occurred in Upper Pegu, where Captain Feilden met with four of these birds in January and a fifth early in February¶.

With regard to its occurrence in India, I may mention

* Rowley's 'Ornithological Miscellany,' vol. ii. p. 151.

† David & Oustalet, 'Oiseaux de la Chine,' p. 35.

‡ David, 'Troisième Voyage,' vol. i. p. 75.

§ Ibis, 1861, p. 253, 1868, p. 43, and 1874, p. 428.

|| 'Stray Feathers,' 1877, p. 6, and 1880, p. 243.

¶ Ibid. 1875, p. 22.

that the British Museum possesses an example from Nepal, and the Norwich Museum one from Madras; the late Mr. Jerdon, referring to this species under the title of *E. vespertinus*, speaks of having found it on the Nilghiris, in the Carnatic, in Central India, along the Himalayan range, and at Darjeeling. He adds that "it is not very unfrequent in Lower Bengal and in the neighbourhood of Calcutta during the rainy season only" *.

But one specimen of *E. amurensis* has been recorded from Ceylon—an immature bird, obtained at Trincomalie in the month of December †.

The winter migration of *E. amurensis* to South Africa is very curious and interesting. The Norwich Museum possesses a specimen obtained by Sir John Kirk on the river Zambesi ‡; and there can be little doubt that this is the species which he met with on the Shiré, apparently on its return northward journey, in February and March, and recorded, under the name of *E. vespertinus*, in 'The Ibis' for 1864, p. 316. Mr. Ayres speaks of meeting with numbers of these birds about Maritzburg, in Natal, during the "summer months" of the southern hemisphere, which of course correspond to the northern winter §. He has also obtained this species in Transvaal in December and January ||; and Mr. Layard has recorded a specimen obtained further inland in the Matabili country ¶. This, however, is not the most westerly extent of its migration, as Mr. Andersson obtained certainly one, and probably three examples, in Damara Land **; he also procured one as far south as the Knysna, which, with one of his Damara specimens, is preserved in the Norwich Museum.

I have had the opportunity of examining several specimens, in different stages, of both species of *Erythropus*; and, judging

* 'Birds of India,' vol. i. p. 41.

† Legge's 'Birds of Ceylon,' p. 120.

‡ The ticket attached to this specimen is not very legible; but the date noted upon it appears to be "1st February."

§ Ibis, 1868, p. 41.

|| Ibid. 1873, p. 280, and 1877, p. 341.

¶ Ibid. 1871, p. 237.

** 'Birds of Damara Land,' p. 17.

from these, I believe that in the first or nestling plumage the two species cannot be distinguished from each other; and I also feel persuaded that this plumage is common to both sexes, though I have not been able to obtain actual proof from dissected specimens of such being the fact.

In the case of *E. vespertinus*, the first plumage is not alluded to in Mr. Sharpe's volume; but a detailed description of it, taken from a young male obtained by the late Mr. Andersson in Damara Land on the 14th of November, will be found in Messrs. Sharpe and Dresser's article on this species in the 'Birds of Europe,' under the head of "specimen no. 4." This stage of plumage is figured as that of the young male by Naumann, in his 'Vögel Deutschlands,' vol. i. pl. 28. fig. 3.

The second plumage, considerably resembling that of the adult female, is described in Mr. Sharpe's volume under the title of "young." It is also represented in the lowest figure of the plate of this species given by Messrs. Sharpe and Dresser in the 'Birds of Europe,' the original of this figure being a young female killed at Malta on the 9th of May, which, in my opinion, was a bird hatched in the spring of the preceding year. As the young females advance in age they lose the dark shaft-marks on the head and underparts which are characteristic of this stage; but even after these marks have left the breast and adjacent parts, the rufous of the undersurface remains for a time decidedly paler than it is in the old females. The second plumage is undoubtedly common to both sexes, as male birds which have been killed whilst in course of change from this to the adult male dress are frequent in collections: one such is preserved in the Norwich Museum, in which a few feathers of even the first plumage still remain near the centre of the breast, thus exhibiting the first, second, and third plumages simultaneously existing, but with the third largely predominating, and with more remains of the second than of the first.

The adult plumages of the male and female in both species of *Erythropus* are fully described in Mr. Sharpe's volume;

and I therefore need not allude further to this stage in either species, except to mention that the last number of the late Mr. Gould's work on the Birds of Asia contains life-sized figures of both sexes of *E. amurensis* in adult dress.

Mr. Sharpe describes the first plumage of *E. amurensis* under the head of "young." A nestling emerging from the down into this dress, which was taken in the month of July, and is preserved in the Norwich Museum, was figured in 'The Ibis' for 1868, pl. 2.

On losing this plumage the young birds assume a dress assimilating even more closely to that of the adult female than is the case in *E. vespertinus*, the only difference being, so far as I have observed, that in this second stage the shape of the dark markings on the sides of the abdomen partake less of the character of transverse bars and more of that of broadened lanceolate shaft-marks than is the case in fully adult females. I entertain no doubt that both sexes pass through this intermediate stage, though I have no absolute proof of it as regards the females; with respect to the males I can speak with some confidence, as the Norwich Museum possesses two that were changing from this stage into that of the adult male plumage.

The remainder of the Falcons are arranged by Mr. Sharpe under two genera—*Falco* and *Hierofalco*; but it seems to me that they may be more naturally assorted into the following generic or subgeneric groups, viz. *Hypotriorchis*, *Æsalon*, *Chicquera*, *Falco*, *Gennaia*, and *Hierofalco*.

With respect to the typical species of *Hypotriorchis*, *H. subbuteo*, I can add nothing to Mr. Sharpe's account, except to refer to its occurrence in Japan, as recorded in 'The Ibis' for 1879, p. 42; but I may mention as regards its near ally, *H. cvieri*, that this very scarce southern Hobby, besides occurring in South and West Africa, as stated by Mr. Sharpe, has also been obtained in East Africa. Capt. Shelley has received it from the Zambesi country, and, still further northward, from Lambo near Formosa Bay. On the west coast it has occurred as far north as Bissao, a specimen from thence being preserved in the Norwich Museum.

Mr. Sharpe's articles on *H. severus*, *H. religiosus*, and *H. lunulatus* have recently been commented on and supplemented in considerable detail by Count T. Salvadori, in his 'Ornitologia della Papuasie e delle Molucche,' vol. i. pp. 33-37; and I have no additional information to record with respect to these Hobbies, except to mention the curious fact that both *H. severus* and *H. lunulatus* occur in the islands of the New-Britain group. Dr. Sclater received from the Rev. G. Brown an adult specimen of *H. severus* obtained at Kaba-kadai, on the coast of New Britain, as recorded in the P.Z.S. for 1880, p. 65; and he also received from Mr. Brown, and recorded in the P.Z.S. for 1879, p. 447, a specimen of *H. lunulatus* from the "Duke-of-York group." A second specimen of the latter species has been subsequently obtained at Blanche Bay, New Britain, by Lieut. Richards, by whom it was transmitted to Canon Tristram.

Two less important insular localities for *H. lunulatus* may also here be mentioned. The Norwich Museum possesses a specimen from Night Island, off the N.E. coast of Australia; and another from Murray Island, off the south coast of New Guinea, is preserved in the British Museum.

The supposed occurrence of *H. lunulatus* in the Feejee group, recorded in 'The Ibis' for 1876, p. 391, proves to have been founded on a misapprehension, as Mr. Sharpe informs me that the specimen in question, when withdrawn from the spirits in which it was immersed for transmission to this country, proved not to be *H. lunulatus*, but a small male of *Falco melanogenys*.

I propose now to refer to *Hypotriorchis eleanoræ*, the largest of the Old-World Hobbies, and by far the most remarkable as regards its mutations and variations of plumage, which are independent of sex, and are due partly to differences of age, and partly, as it would seem, to a tendency towards melanistic coloration developed more strongly in some individuals than in others.

The first or nestling plumage, in its medium and most frequent phase, is figured in 'The Ibis' for 1869, pl. xvi. A similar specimen is represented by the lowest figure in

the plate of this species given in the 'Richesses Ornithologiques du Midi de la France,' by Jaubert and Barthélemy-Lapommeraye.

A somewhat paler specimen, but of similar age, is figured at p. 232 of the 'Naumannia' for 1856, under the name of *Falco gracilis* of A. and L. Brehm*. A figure, very like the last named, is associated with an adult *H. concolor*, as the young of that species, in the frontispiece to Finsch and Hartlaub's 'Vögel Ost-Afrika's;' this, in my opinion, also represents a pale-coloured young specimen of *H. eleanora*.

Some nestlings of the latter species, however, are darker than the specimen figured in 'The Ibis' for 1869; and such a one is represented in Fritsch's 'Vögel Europa's,' pl. 3. fig. 6, but is there inscribed, erroneously as I consider, "mas ad."

In a letter which Lord Lilford was good enough to send me respecting some dark-coloured young birds of this species which came into his possession, he writes thus:—"The specimens figured in 'The Ibis' for 1869 are very decidedly lighter in general coloration than the young birds received by me, with some down still adhering to them, as mentioned in Dresser's 'Birds of Europe;' in fact, they were precisely like young Hobbies, if any thing rather darker than an average nestling of that species, the rufous edgings of the feathers very narrow, and the ground-colour of the breast certainly darker than in the figure above mentioned."

The next plumage assumed by this species appears to be that which resembles, more or less closely, the adult plumage of *H. subbuteo*, from which some specimens only differ in the margins of the feathers on the breast, abdomen, and flanks being rufescent instead of white, and in the presence of more or less of a rufous tinge on the throat and cheeks. A male in this plumage is figured in

* Mr. Sharpe quotes this reference, but, I venture to think, incorrectly, amongst the synonyms of *H. concolor*. Lord Lilford had previously pointed out the correct identification of *Falco gracilis* in 'The Ibis' for 1865, p. 175.

the second edition of Bree's 'Birds of Europe,' vol. i. p. 46, and a female in Dresser's 'Birds of Europe,' vol. vi. pl. 383; a male and female, differing but very slightly from the above, are represented in Schlegel and Susemihl's 'Vögel Europa's,' pl. 54. figs. 1 & 2, and a somewhat similar female in Fritsch's work already referred to, pl. 3. fig. 5.

Other examples, though probably referable to the same stage of plumage, or nearly so, as those last mentioned, have the rufous on the lower parts duller and less conspicuous, and also have the cheeks and throat more or less dark-coloured, and sometimes entirely so. Are these dusky-tinted individuals birds which have previously worn the bright and well-defined hobby-like plumage (represented in the figures to which I have last referred), and which are now passing from that stage to the entirely fuliginous plumage? or are they birds which were dark-coloured as nestlings, and in which the hobby-like plumage has never been more than partially assumed, having been modified by melanistic tendencies in the constitution of the individual? Dr. Krüper appears to be of the latter opinion (*vide* Journ. für Orn. 1864, p. 11) *; and such is also the opinion of Dr. Louis Bureau, of Nantes, who has paid much attention to this species, and has favoured me with valuable communications on the subject of its variations of plumage.

A further question arises—do the bright-coloured hobby-like individuals continue to wear that plumage to the end of their days, or do they ultimately assume the fuliginous dress, though perhaps not so rapidly as others which have from the beginning developed a more melanistic tendency? So far as I am aware, this question has not yet been satisfac-

* Dr. Krüper's paper above referred to is a very interesting one, and especially important as containing the results of his observations on the Eleanora Hobby in some of the islands of the Greek archipelago. Valuable portions of this paper are quoted in the article on this species in Dresser's 'Birds of Europe;' and a much fuller extract, translated into French, will be found in the 'Bulletin de la Société Ornithologique Suisse,' vol. i. p. 132, for an acquaintance with which I am indebted to the kind attention of Dr. Bureau.

torily settled; but in connexion with it I may mention that a bright-coloured hobby-like male which I kept in confinement between six and seven years, as recorded in 'The Ibis' for 1867, p. 380, certainly showed some, though but a very slight, tendency towards the assumption of fuliginous tints, in the extension both in length and breadth of the dark centres to the feathers on the underparts, especially on the flanks, and in the edges of these dark centres becoming less sharply defined. I think also that the colouring of the rufous plumage of the lower parts became a little duller.

Whether the next (that is, the fuliginous) stage is ultimately attained by every individual, or only by those possessing a melanistic tendency, is therefore a point which I think is still doubtful; but it seems tolerably certain that such individuals as attain it do so gradually, the fuliginous colour becoming more uniform and probably also more deeply tinted as the age of the bird increases. A figure of the earlier fuliginous stage, copied from that in Bonaparte's 'Fauna Italica,' is given in the first edition of Bree's 'Birds of Europe,' vol. i. p. 44; and the second edition of that work, vol. i. p. 47, contains the representation of a slightly more advanced specimen, a female from Sardinia. A less satisfactory figure of an individual apparently in similar plumage is given on plate 53 of Schlegel and Susemihl's volume already referred to. Lastly, the most uniform and deeply tinted plumage of this variable species is represented in the same work, pl. 54. fig. 3, also in Dresser's 'Birds of Europe,' pl. 383, from a Sardinian male, and in the second edition of Bree's 'Birds of Europe,' vol. i. p. 43, from a male and female also killed in Sardinia, respecting which Dr. Bree remarks that the plate "shows a very old male and female quite black; there are no traces of bars on the under surface of the tail of the male, and very slight ones on that of the female." I must, however, add that I have never seen a specimen which I should myself call absolutely black, but only dark brown, and that with sometimes a decided shade of grey on the concealed portions of the scapulars: this grey tint would probably, when the bird had newly moulted, be apparent also on the exposed portions

of these feathers, and perhaps on the mantle generally, giving the appearance described as that of an old male in Dresser's 'Birds of Europe,' vol. vi. p. 103.

Figure 4 on pl. 54 of Schlegel and Susemihl's 'Vögel Europa's' represents a specimen so grey and so closely resembling in colour the adult plumage of *H. concolor* that I should not hesitate to refer it to that species were it not that the wings, as there represented, are scarcely so long as those of *H. concolor*; and the plate, being taken from a drawing by Mr. Wolf, is not likely to be inaccurate in that respect. Dr. Bureau has been so good as to inform me that the original of this figure is the specimen thus described by Professor Schlegel in his 'Museum des Pays-Bas,' vol. i. *Falcones*, p. 25: "*Falco eleanoræ*, femelle adulte, Grèce, par M. Schulze en 1843. Variété à teinte couleur de schiste." The authors of 'Les Richesses Ornithologiques du Midi de la France,' at p. 523 of that work, quote a description furnished to them by the late Jules Verreaux of a very similar specimen; but as that ornithologist held the erroneous opinion that *H. concolor* is not specifically distinct from *H. eleanoræ*, it is possible that the bird he described was in reality an example of *H. concolor*.

Mr. Sharpe's volume does not contain any reference to the geographical distribution of *H. eleanoræ*; but a summary of what is known on this head will be found in Dresser's 'Birds of Europe,' vol. vi. p. 104. It is, however, there stated that this species does not occur in North-eastern Africa, which is not quite correct, as the plate of "*Falco gracilis*" of Brehm, to which I have already referred, and which unquestionably represents the first plumage of *H. eleanoræ*, is inscribed "In deserto prope Cairo, Sept. 1851" *. I may also mention as an addition to the localities given for *H. eleanoræ* in Mr. Dresser's work, that Mr. Edward Newton obtained a specimen in immature plumage in the island of Mauritius, after stormy weather in the month of December.

There remains but one Old-World species of the genus

* This fact has been already referred to in the 'Rambles of a Naturalist,' by J. H. Gurney, Jun., p. 122.

Hypotriorchis to be referred to, the remarkably long-winged and elegant *H. concolor*. In regard to this I may mention that in Mr. Sharpe's list of its synonyms he omits "*Falco schistaceus*" of Hemprich and Ehrenberg's 'Symbolæ Physicæ,' pl. 19, under which name good figures are given of the male, female, and egg of this species; also that since the publication of Mr. Sharpe's volume, *H. concolor* has been described and figured in adult and immature dress and with osteological details in Milne-Edwards and Grandidier's work on the birds of Madagascar, vol. i. p. 37, and plates 11, 12, and 12 a.

Mr. Sharpe, in his article on *H. concolor*, states that "very old examples become leaden black;" but no specimens answering to this description have ever come under my observation.

Mr. Sharpe has included amongst the synonyms of *H. concolor* "*Æsalon tibialis*, Kaup," which seems to me not to be based upon this species, but to be compounded of Le Vaillant's "*Faucon à culotte noire*" (a bird which I cannot identify) and *Dissodectes ardesiacus*.

It may be worth mentioning, in conclusion, that an apparently authentic record of the occurrence of a specimen of *H. concolor* near Gaillac, in the south of France, on the 3rd October 1873, will be found in the 'Bulletin de la Société Zoologique de France' for 1876, p. 91.

Of the three American species of the genus *Hypotriorchis*, *H. fusco-cæruleus*, *H. rufularis*, and *H. deiroleucus*, the first has been erected by Mr. Ridgway into a separate subgenus, under the name of "*Rhynchofalco*"*; but I confess that I do not find sufficient grounds for removing it from its accustomed position in the genus *Hypotriorchis*.

Mr. Sharpe does not mention the colour of the iris in this species, which is recorded as "dark hazel" in the P. Z. S. for 1869, p. 155.

The geographical range of *H. fusco-cæruleus* is given by Mr. Sharpe as extending from Mexico to Peru and the Argentine Republic; but it is found further to the northward

* *Vide* Land Birds of North America, vol. iii. p. 154.

and also further south; 'The Ibis' for 1878 contains a record of its nesting in Patagonia at p. 398, and in Texas at p. 487.

Mr. Sharpe has adopted for the next species the specific name of "*albigularis*;" but that of "*rufigularis*," which is also referable to it, and which is to be found on the same page of Daudin's work, has been much more generally used, and I therefore think it better to retain it. The colour of the iris in this Hobby is not referred to by Mr. Sharpe; and I may therefore mention that in a specimen which was living some years since in the gardens of the Zoological Society the irides were dark brown. This beautiful species is remarkable for the disparity in size between the sexes, and also for the slightness of the difference in coloration between the adult and immature plumage. The latter feature is not alluded to by Mr. Sharpe; but a description of it by Mr. Ridgway will be found in a footnote to page 131 of the third volume of the 'Land Birds of North America.'

The remaining American species of the genus *Hypotriorchis*, *H. deiroleucus*, has been referred by Mr. Sharpe to the "Orange-breasted Hobby" of Latham, of which "*Falco aurantius*" of Gmelin is the equivalent; but while it seems to me doubtful what species it was which Latham intended to describe under this name, it is, I think, evident that his description by no means accords with the characters of that now under consideration, for which I would therefore retain Temminck's specific name of "*deiroleucus*."

This is the most robustly formed and probably the most powerful of the Hobbies, as is especially apparent in the female bird, which, as in *H. rufigularis*, is considerably larger than the male; and it may be considered as approaching the most nearly of any of the species of *Hypotriorchis* to the genus *Falco*, in the restricted acceptance of the latter term.

In the P. Z. S. for 1874, p. 550, M. Taczanowski has recorded this species from Central Peru, which extends its known geographical range towards the south-west beyond the limits given for it by Mr. Sharpe.

Mr. Sharpe uses for the European Merlin, to which I next propose to allude, the designation of "*Falco regulus*;" but the list of synonyms of this species in Dresser's 'Birds of Europe,' vol. vi. p. 83, shows that Tunstall's specific name of "*Æsalon*" has priority. If, however, we follow Kaup, as I am disposed to do, and adopt "*Æsalon*" as a subgeneric appellation, I think we ought in that case to fall back upon "*regulus*" as the specific name, and call the present species *Æsalon regulus*.

With reference to Mr. Scully's interesting remarks on the dress ultimately assumed by the female of this species (*vide* Ibis, 1881, p. 418), I may mention that he was so good as to show me his Cashmere female there described, and that I should without hesitation have taken it to be an adult though very pale-tinted male, had not its female sex been ascertained beyond question by dissection, Mr. Scully having not only anatomically examined it, but having also attached to the skin a sketch of the ova *in situ*, as brought to light by his dissection.

Mr. Sharpe's summary of the geographical range of this species does not include Northern Africa and the more southern countries of Central Asia; but detailed information on this head will be found in the article on this species in Dresser's 'Birds of Europe,' to which I have already referred; and to this I may add that the Norwich Museum possesses a specimen from Japan and another from Formosa*, two localities more eastern than any recorded by Mr. Dresser.

I have never seen an example of the small race of this species recorded by Severtzoff from Turkestan (*vide* Ibis, 1875, p. 107), and can therefore offer no opinion as to its specific distinctness.

Referring next to the ordinary Merlin of the American continent, *Æsalon columbarius*, I may mention that the Norwich Museum possesses a specimen from Quito and another from Cuença, both these localities being somewhat more to the southward than that given by Mr. Sharpe as the southern limit of this species.

* *Conf.* Ibis, 1872, p. 327, 1877, p. 144, and 1878, p. 249.

Mr. Sharpe does not refer to the occurrence of this Merlin in the West Indies; but the Norwich Museum contains specimens from Jamaica, and it has also been recorded from Cuba*, Guadeloupe†, Martinique‡, Tobago§, and Trinidad||.

An ample account of this species will be found in the 'Land Birds of North America,' vol. iii. pp. 144 to 154, including two subspecific races, neither of which has come under my own observation; one of these is a dark race, separated by Mr. Ridgway as "var. *suckleyi*," and found in "Northern California, Oregon, and Washington Territory," the other, a pale race, called by Mr. Ridgway "var. *richardsoni*," inhabiting the "interior regions of North America between the Mississippi valley and the Rocky Mountains from Texas to the Arctic Regions."

Mr. Ridgway considers that the figure of a female Merlin from the plains of the Saskatchewan, given in the 'Fauna Boreali-Americana,' part 2, pl. 25, represents a specimen of the latter subspecies.

I feel no hesitation in adopting Bonaparte's subgenus *Chiquera* for the Indian Toorumtee Falcon, which on this footing must stand as *C. typus*, while its African congener will be *C. ruficollis*.

Mr. Sharpe expresses a doubt as to the distinctness of these two species, which I by no means share. In the adults of *C. ruficollis* the whole upper surface, except the head, nape, and quill-feathers of the wings, is conspicuously cross-barred with black, whilst in those of *C. typus* these transverse dark bars are absent from the scapulars, interscapulars, and back, and where present are decidedly fainter and less conspicuous. *C. ruficollis* has also a black mark behind the eye and another below it, both of which are wanting in *C. typus*; it has also a

* Finsch in P. Z. S. 1870, p. 556; also Gundlach, quoted by Ridgway, Land Birds of N. America, vol. iii. p. 145.

† Proc. of the U.S. Nat. Mus. vol. i. p. 450.

‡ Jardine, quoted by Ridgway, Land Birds of N. America, vol. iii. p. 145.

§ Jardine, Ann. & Mag. Nat. Hist. xviii. p. 118 (1846).

|| Léotaud, Ois. de la Trinidad, p. 26; see also Finsch in P. Z. S. 1870, p. 556.

pale salmon-coloured tint on the upper breast, which I do not recollect to have met with in *C. typus*. The immature specimens of *C. typus*, however, approach more closely than the adults to the adult plumage of *C. ruficollis*, the cross-barring on the upper surface of the immature *C. typus* being as extensively distributed as in the adult of *C. ruficollis*, though, except on the tertials and rectrices, it is paler and less strongly marked. I may also mention that the young birds of *C. typus* have the lesser wing-coverts edged with brown, and short dark shaft-marks on the feathers of the upper breast.

In *C. ruficollis* the young bird has the plumage throughout of a darker hue than the adult; this is especially the case on the crown of the head, where the rufous tint is deeper than in the adult, and, in addition, each feather has a somewhat broad black shaft-mark; all the feathers of the upper part of the mantle are more or less edged with rufous brown, this edging being broadest on the lesser wing-coverts; the transverse bands on the lower surface are less regular than in the adult, and all the intermediate spaces are a rich fulvous instead of being white as in the old bird. I have here noted these details, as Mr. Sharpe does not refer to the immature plumage of either species.

Mr. Sharpe gives "the whole of Africa" as the habitat of *C. ruficollis*; but it is absent from the northern portion of that continent, not extending further northward, so far as I am aware, than Senegambia towards the north-west, and Nubia towards the north-east; and I must add that the only evidence I have of its extending to Nubia is a specimen in the Norwich Museum, which was stated to be Nubian by the late Jules Verreaux, through whose hands it passed into that collection. It appears, however, to be a common species in Sennaar, and also to occur, though less abundantly, in Abyssinia.

XII.—*Second Note on the Species of the Tyrannine Genus*
Hirundinea. By P. L. SCLATER.

IN an article on the Tyrannine genus *Hirundinea*, published