XIX BIRDS.

By E. C. STUART BAKER.

In addition to the birds collected by Mr. Kemp on the Abor Expedition, I have had sent me for examination a large series of skins collected by Dr. J M. Falkiner, who accompanied the column as Medical Officer, as well as a few others collected by Capt. F. M. Bailey. The skins obtained by Mr. Kemp are all in the collection of the Indian Museum, and bear numbers which I give, prefixed by the abbreviation "I.M." The remainder of the skins bear the catalogue numbers of the Bombay Natural History Society, and against these specimens I note the catalogue numbers together with the letters "B.N.H.S." The whole of these latter have been collected by Dr. Falkiner, with the exception of a few against which I have given in brackets the initials F.M.B. (Capt. Bailey). The names of Capt. Sir George Duff Dunbar and Capt. the Hon. M. de Courcy, who appear also to have collected a few specimens on behalf of the Indian Museum, are also added in some instances.

The total number of skins I have had to examine is 192 which are referable to 111 species; a not inconsiderable number when one takes into account the great difficulties under which the collectors worked and the impossibility of collecting at any distance from the camps or stockades. As might be expected from the nature of the expedition, the birds collected are for the most part species which are conspicuous either on account of their plumage or their habits and the small skulking birds of the Timeliine groups, the Wrens and similar insignificant forms, amongst which we might have hoped to obtain a new species, are very poorly represented.

Of the 111 species collected all belong to the true Indo-Himalayan avifauna with the exception of *Cryptolopha jerdoni*, which is closer to the eastern than the western form, *Aethopyga seheriae seheriae*, the specimens of which are curiously like those collected in Bhamo and separated by Hume under the name of *andersoni*, and *Sitta cinnamoneoventris* which shows an approach to *S. neglecta*.

The specimens obtained of the genera *Megalaema* and *Cyanops*, *Pitta*, *Myophoneus* and *Petrophila*, which might have been expected to show some slight approximation to the Burmese forms, are all quite typical specimens of the western races.

On the whole, therefore, we may say that the collection of birds is representative of what one would have expected to find in the Indo-Himalayan-Burmese Region; but that they are more completely Himalayan and less Burmese in character than are similar collections made south of the Brahmaputra in the same longitude or even further west.

A very striking feature in this collection of birds is the very deep tint observable in the colour of so many of the specimens, attributable, doubtless, to the heavy rainfall and dense forests of this part of India. This depth of colour is especially noticeable in all the specimens of *Sturnopaster, Megalaema, Harpactes* and *Rhopodytes*, whilst in the case of *Rhipidura albicollis* I have considered it so marked as to make it necessary to form the north-eastern bird into a new subspecies.

One other point calling for remark is the comparatively low elevation at which certain birds, such as *Chelidorhynx*, have been found. This feature is common to the whole of the extreme north-east of Assam, where one meets with a fauna, and I believe flora, which elsewhere obtains at some 1500 or 2000 feet higher elevation. This may be due to the comparatively small area covered by the foot-hills between the higher ranges, upon which there is heavy snow-fall, and the plains. This naturally gives a correspondingly low temperature and the avifauna elsewhere inhabiting a much greater elevation here consequently works much lower down and even well into the plains.

In compiling the following catalogue I have generally given references to only two works, the "Avifauna of British India" by Oates and Blanford and the "Catalogue of Birds in the British Museum." The abbreviations I have used in referring to these are "O. & B." and "B.M. Cat." respectively.

I have in one or two places also referred to Dr. Hartert's recent work "The Birds of the Palaearctic Region" published in Germany. This is the latest publication on the subject and is one mass of information and research put in the simplest and most direct manner, and I refer to it as the authority upon which the sub-specific value of many of our Indian birds must be taken. The abbreviation used for this book is "D.V.P." (Die Vögel der Paläarktischen Fauna).

The following abbreviations are also used on one or two occasions:—

"B.N.H.S.J"=Journal of the Bombay Natural History Society and "N.Z."=Novitates Zoologicae.

I have to thank the British Museum authorities for much assistance In placing material at my disposal for the purpose of comparison and for constant help in facilitating my work generally.

Order **PASSERES.**

Family CORVIDAE.

Sub-family *CORVINAE.*

1. **Cissa chinensis** (Bodd.).

O. and B., vol. i, p. 28.
B. M. Cat., vol. iii, p. 85.

(*a*) ♂, Sadiya, N.-E. Assam, 28-ii-11. I.M. No. 25271.
(*b*) Not sexed. Rotung, March, 1912. B.N.H.S. No. 18.
(*c*) Not sexed. Mishmi Hills, Jan.—Feb. 1912. B.N.H.S (*F.M.B.*).

This beautiful but conspicuous bird is common both N. and S. of the Brahmaputra from the level of the plains to about 3000 feet.

2. **Dendrocitta frontalis** (Maclell.).

O. and B., vol. i, p. 33.
B. M. Cat., vol. iii, p. 78.

(*a*) ♀, Kobo, 400 ft., 1-xii-11. I.M. No. 25287.

The Black-browed Magpie is generally to be found at elevations far higher than this, seldom, indeed, below 2000 ft., but here in the extreme N.-E. of the Empire, it is common both N. and S. of the Brahmaputra in the foot-hills of the Himalayas extending some way into the plains. Dr. H. N. Coltart found it common at and around Margherita.

Sub-family *PARINAE.*

3. **Parus major cinereus** (Vieill.).

O. and B., vol. i, p. 46.
B. M. Cat., vol. viii, p. 16.
Hartert, D.V.P., part iii, p. 345.

(*a*) ♂, Kobo, 400 ft., 10-xii-11. I.M. No. 25351.

Dr. Hartert, in his splendid work on Palaearctic Birds, has gone very carefully into the sub-division and nomenclature of the Titmice of this genus, *Parus*, and this particular sub-species of *Parus major* which we, in India, have hitherto known as *atriceps* will now have to be known as *cinereus*. The name *cinereus* (Vieill.) dates from 1818 and not 1823 as shown by Oates and so undoubtedly has priority over *atriceps*, which dates four years later. The specimen in this collection is a bird with a wing of 78·1 mm.

Sub-family *PARADOXORNITHINAE.*

4. **Scaeorhynchus ruficeps ruficeps** (Blyth).

O. and B., vol. i, p. 68.
B. M. Cat., vol. vii, p. 491.
Hartert, N.Z., vol. vii, p. 548.

(*a*) Unsexed. Rotung, March 1912. B.N.H.S. No. 17.

This bird is identical with Sikkim specimens, having a wing of only 85 mm. as against 90·95 mm. in the form found in the hills south of the Brahmaputra. The under surface is very white with the buff on the sides restricted entirely to the flanks.

Family CRATEROPODIDAE.

Sub-family *CRATEROPODINAE.*

5. **Dryonastes ruficollis** (Jard. and Selby).

O. and B., vol. i, p. 73.
B. M. Cat., vol. vii, p. 454.

(*a*) Not sexed. Rotung, 1400 ft., 7-iii-12. I. M. No. 25310.
(*b*) ♂, Kobo, 400 ft., 29-iii-12. I.M. No. 25282.
(*c*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 21.

6. **Garrulax leucolophus leucolophus** (Hardw.).

O. and B., vol. i, p. 77.
B. M. Cat., vol. vii, p. 435.

(*a*) ♂, Rotung, 2-i-12. I.M. No. 25281.
(*b*) Not sexed. Rotung, March 1912. B.N.H.S. No. 29.
(*c*) ♀, Krolling, Dibang Valley, Mishmi Hills, 14-i-12. B.N.H.S. (*F.M.B.*)

All three of these specimens are quite typical *leucolophus* and do not in any way approach the Burmese sub-species *belangeri*.

"Iris reddish brown, bill black, gape yellow, legs grey. Mishmi name Puhu, Naga name Ngo." (*F.M.B.*)

7. **Garrulax moniliger** (Hodg.).

O. and B., vol. i, p. 81.
B. M. Cat., vol. vii, p. 442.

(*a*) ♀, Kobo, 400 ft., 13-xii-11. I.M. No. 25256.

8. **Grammatoptila striata austeni** (God.-Aus.).

O. and B., vol. i, p. 104.

(*a*) and (*b*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. Nos. 25306 and 25307.
(*c*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 9.

These birds are all *austeni*, but this is merely a sub-species of *striata* and a specimen of the latter from Kumaon in the B.M

collection shows distinct signs of the dark coronal bands, the feature which distinguishes *austeni* from *striata*. South of the Brahmaputra throughout the Cachar and Naga Hills only *austeni* is met with, and it would appear to work as far west on the north as Bhutan and perhaps into Eastern Nepal.

9. **Pomatorhinus ferruginosus** (Blyth).

O. and B., vol. i, p. 120.
B. M. Cat., vol. vii, p. 422.

(*a*) ♂, Upper Rotung, 2150 ft, 6-i-12. I M. No. 25262.

This is unfortunately rather a poor specimen, but it appears to have the rufous on the breast a good deal more restricted in extent than in any of the series in the British Museum.

Sub-family *TIMELIINAE.*

10. **Pellorneum mandellii** (Blanf.).

O. and B., vol. i, p. 140.
B. M. Cat., vol. vii, p. 518.

(*a*) ♀, Kobo, 400 ft., 10-xii-11. I.M. No. 25261.

The so-called Burmese sub-species, *P. m. minus*, must I think be suppressed. Many years ago when working in the N. Cachar Hills, where *P. mandellii mandellii* was the usual form met with, I was constantly also obtaining birds which appeared to be nearer *minus* than *mandellii*, and often there would be one of a pair, one of which was *minus* and the other of which was a quite typical *mandellii*. The same thing occurs in the Khasi and Naga Hills where the two extremes are almost equally common and where every intermediate form exists. Again, in the Southern Shan States, though, perhaps, there are more *minus* than *mandellii*, yet the latter is quite common, and specimens which cannot be said to be either one or the other are even more so. In order to create a sub-species it is essential that there should be some dividing line either in latitude, longitude or in elevation, but all that can be said as regards this species is that the form *mandellii* is the more prominent in the north and *minus* in the south and east of its range.

The specimen in this collection is a very dark bird with the streaks on the lower plumage exceptionally dark and broad.

11. **Alcippe nepalensis** (Hodg.).

O. and B., vol. i, p. 157.
B. M. Cat., vol. vii, p. 620.

(*a*) ♀, Upper Rotung, 2150 ft., 6-i-12. I.M. No. 25323.
(*b*) ♂, Upper Rotung, 2150 ft., 13-iii-12. I.M. No. 25340.

12. **Stachyris nigriceps** (Hodg.).

O. and B., vol. i, p. 162.
B. M. Cat., vol. vii, p. 532.

(*a*) Not sexed, Rotung, Dibang Valley, Mishmi Hills, 2500 ft., 9-i-12 (*F.M.B.*).

As I have already recorded, Hume was quite correct in stating that the bill of this bird has a seasonal change of colour becoming much darker during the breeding season.

13. **Stachyris chrysaea** (Hodg.).

O. and B., vol. i, p. 163.
B. M. Cat., vol. vii, p. 601.

(*a*) Rotung, Dibang Valley, Mishmi Hills, 2500 ft., 9-i-12.

"Iris reddish brown; legs yellowish; bill dark grey. Mishmi name Pra-li-ne or Pe-ma-ra." (*F.M.B.*)
During the breeding season the bill of the male, but not of the female, becomes very dark brown.

14. **Pseudominla castaneiceps** (Hodg.).

O. and B., vol. i, p. 172.
B. M. Cat., vol. vii, p. 600.

(*a*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. No. 25370.

Sub-family *BRACHYPTERYGINAE.*

15. **Tesia cyaniventris** (Hodg.).

O. and B., vol. i, p. 192.
B. M. Cat., vol. vii, p. 604.

(*a*) ♂, Balek, 24-iii-12. I.M. No. 25332.

Sub-family *SIBIINAE.*

16. **Sibia picaoides** (Hodg.).

O. and B., vol., i, p. 195.
B. M. Cat., vol. vii, p. 401.

(*a*) ♀, Misshing, 2800 ft., Feb. 1912. B.N.H.S. No. 6.

(*b*) Not sexed. Misshing, 2800 ft., Feb. 1912. B.N. H.S. No. 50.
(*c*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. No. 25266.
(*d*) ♂, Upper Rotung, 21-i-12. I.M. No. 25278.

All four of these specimens are somewhat darker, and also have less of a reddish tinge than the specimens in the British Museum. At the same time the latter skins which are nearly all from the Southern Shan States are mostly old specimens and the oldest are palest and most red, so that, possibly, the difference is due only to their having become somewhat bleached. It must be noted, however, that in being so dark in colouration *Sibia picaoides* merely agrees with the general trend in the plumage of the birds of these hills.

17. **Lioptila annectens** (Blyth).

O. and B., vol. i, p. 199.
B. M. Cat., vol. vii, p. 80.

(*a*) Not sexed. Misshing, 2800 ft., Feb. 1912. B.N. H.S. No. 35.

The elevation is somewhat low for Blyth's Sibia, but I have seen it quite as low down in the N. Cachar Hills in winter and nearly as low as this in the Khasi Hills. It extends north of the Brahmaputra River from Sikkim to Karennee, meeting its southern range—which extends throughout the Khasi, Garo, Cachar and Naga Hills—to the east of Dibang and the Dihang Rivers. I can see no variation in its colouration throughout this wide area.

18. **Lioptila pulchella** (God.-Aus.).

O. and B., vol. i, p. 200.
B. M. Cat., vol. vii, p. 407.

(*a*) Not sexed. Kalek, 19-iii-12. I.M. No. 25269.
(*b*) "♂, Indoling, Dibang Valley, Mishmi Hills, 4-ii-12, about 4500 ft. Bill black, legs greyish brown, soles yellow." (*F.M.B.*).

In these two specimens the whole of the cheeks, ear-coverts and patch behind the latter are black. This appears, however, to be only an individual variation for the series collected by Godwin-Austen in the Naga and Dafla Hills have the ear-coverts, etc., ranging from brown with practically no sign of black to wholly black.

19. **Actinodura egertoni egertoni** (Gould).

O. and B., vol. i, p. 201.
B. M. Cat., vol. vii, p. 403.

(*a*) Not sexed. Rotung, March 1912. B.N.H.S. No. 46.

(*b*) " ♀ , Bipani, Dibang Valley, Mishmi Hills, 18-i-12. Bill brown, lower mandible yellowish, legs brown, iris grey. Naga names Nya-si or Ko-yu." (*F.M.B.*).

20. **Siva cyanuroptera** (Hodg.).

O. and B., vol. i, p. 209.
B. M. Cat., vol. vii, p. 640.

(*a*) ♂ , Kobo, 400 ft., 11-xii-11. I.M. No. 25355.

This is the lowest elevation from which this bird has been recorded, though Dr. H. N. Coltart got it in the hills round about Margherita at little over 1000 ft. Generally speaking it is never found below 2000 ft., and but seldom below 3000 ft.

21. **Ixulus occipitalis** (Blyth).

O. and B., vol. i, p. 217.
B. M. Cat., vol. vii, p. 613.

(*a*) ♂ , Rotung, 1400 ft., 7-i-12. I.M. No. 25316.
(*b*) Not sexed. Rotung, March 1912. B.N.H.S. No. 33.

22. **Ixulus flavicollis** (Hodg.).

O. and B., vol. i, p. 218.
B. M. Cat., vol. vii, p. 612.

(*a*) ♂ , Komsing, 24-ii-12. I.M. No. 25333.

Sub-family *LIOTRICHINAE.*

23. **Liothrix lutea** (Scop.).

O. and B., vol. i, p. 221.
B. M. Cat., vol. vii, p. 644.

(*a*) ♀ , Rotung, 8-iii-12. I.M. No. 25345.
(*b*) ♀ , Rotung, 1-i-12. I.M. No. 25346.
(*c*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 27.
(*d*) Not sexed. Misshing, 2000 ft., March 1912. B.N.H.S. No. 28.

24. **Cutia nepalensis** (Hodg.).

O. and B. vol. i, p. 222.
B. M. Cat., vol. vii, p. 646.

(*a*) and (*b*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. No. 25303 and 25265.
(*c*) No data. B.N.H.S. No. 15.

Although none of these birds are sexed they are all undoubtedly males.

25. **Pterutheus melanotis** (Hodg.).

O. and B., vol. i, p. 226.
B. M. Cat., vol. viii, p. 117.

(*a*) Between Kalek and Misshing, 15—18-iii-12. I.M. No. 25326.

Although this bird is not sexed it is undoubtedly a female.

26. **Chloropsis hardwickii** (Jard. and Selby).

O. and B., vol. i, p. 236
B. M. Cat., vol. vi, p. 18.

(*a*) ♂, Rotung, 10-xii-11. I.M. No. 25258.
(*b*) ♀, Rotung, 13-xii-11. I.M. No. 25291.
(*c*) ♂, Rotung, 18-xii-11. I.M. No. 25350.
(*d*) No data. I.M. No. 25375.
(*e*) and (*f*) Not sexed. Rotung, March 1912. B.N.H.S. Nos. 23 and 48.

Specimen (*b*) which is marked ♀ is really a young ♂, (*c*) is a young ♂ in juvenile plumage.

27. **Melanochlora sultanea** (Hodg.).

O. and B., vol. i, p. 241.
B. M. Cat., vol. viii, p. 6.

(*a*) ♂, Rotung, 9-iii-12. I.M. No. 25268.
(*b*) Not sexed. March 1912. B.N.H.S. No. 22.

The second specimen is also a male.

Sub-family *BRACHYPODINAE.*

28. **Criniger flaveolus flaveolus** (Gould).

O. and B., vol. i, p. 255.
B. M. Cat., vol. vi, p. 77.

(*a*) ♂, Kobo, 8-xii-11. I.M. No. 25293.
(*b*) and (*c*) Not sexed. Rotung, March 1912. B.N.H.S. Nos. 43 and 45.

All three of these specimens are typical *flaveolus* and show no approach to the Burmese form *C. f. burmanicus.*

29. **Hemixus flavala flavala** (Hodg.).

O. and B. vol. i, p. 263.
B. M. Cat., vol. vi, p. 49.

(*a*) ♀, Rotung, 1400 ft., 10-iii-12. I.M. No. 25267.
(*b*) ♂, Rotung, 2-i-12. I.M. No. 25295.
(*c*) ♀, Bipani, Dibang Valley, Mishmi Hills, 2100 ft., 16-i-12 (*F.M.B.*).

"Bill grey, feet light horn. Mishmi name Echo-chi. Naga names Kurkapa or Gasha-totai." (*F.M.B.*).

As with the *Criniger* so with this *Hemixus*, there is no trace of any approach to the Burmese forms, though in this case we should hardly expect it as the Himalayan forms extend well into Northern Burma. The specimens, however, are all three rather exceptionally dark though I can match them with birds from Cachar and the Khasi Hills.

30. **Hemixus maclellandi maclellandi** (Horsf.).

O. and B., vol. i, p. 265.
B. M. Cat., vol. vi, p. 50.

(*a*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 40.

The single specimen obtained of this species agrees exactly with Sikkim and Nepal birds.

31. **Alucurus striatus** (Blyth).

O. and B., vol. i, p. 266.
B. M. Cat., vol. vi, p. 91.

(*a*) and (*b*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. Nos. 25304—5.

32. **Molpastes haemorrhous bengalensis** (Hodg.).

O. and B., vol. i, p. 271.
B. M. Cat., vol. vi, p. 128.

(*a*) ♂, Kobo, 400 ft., 10-xii-11. I.M. No. 25300.
(*b*) ♀, Kobo, 400 ft., 29-iii-12. I.M. No. 25259.

Here also we have the purely Himalayan and Northern Indian form, although south of the Brahmaputra in the extreme east of Assam we have birds which more nearly approach *Molpastes h. burmanicus*, and in Cachar, Sylhet and Chittagong meet with specimens which are identical with the Burmese birds in all respects.

Specimen (*b*) is a curiously "bleached" specimen, one cannot call it albino, with the blacks and browns reduced to a cinnamon brown.

33. **Otocompsa emeria emeria** (Linn.).

O. and B., vol. i, p. 276.
B. M. Cat., vol. vi, p. 157.

(*a*) ♂, Kobo, 400 ft., 9-xii-11. I.M. No. 25329.
(*b*) ♀, Sadiya, 25-xi-11. I.M. No. 25270.
(*c*) ♂ and (*d*) ♀, Krolling, Dibang Valley, Mishmi Hills, 2300 ft., 14-i-12. "Mishmi names Pya-jo, Naga Jango." (*F.M.B.*).

34. **Otocompsa flaviventris** (Tick.).

O. and B., vol. i, p. 278.
B. M. Cat., vol. vi, p. 161.

(*a*) Not sexed. Pasighat, 600 ft., no date. I.M. No. 25373.

Family SITTIDAE.

35. **Sitta cinnamomeoventris** (Blyth).

O. and B., vol. i, p. 301.
B. M. Cat., vol. viii, p. 351.

(*a*) ♂, Rotung, 1400 ft., 8-iii-12. I.M. No. 25318.
(*b*) ♂, Rotung, 1400 ft., 1-i-12. I.M. No. 25339.
(*c*) Not sexed. Misshing, Feb. 1912. B.N.H.S. No. 10.

Specimen (*c*), which is a male, is a very interesting specimen with a curiously pale, almost white throat and the colour of the underparts very pale also, little darker in fact than in many females. It is one of the few birds obtained in these hills on this expedition which shows an approach to any Burmese form, this specimen being a decided approach to *Sitta neglecta* which is common in Pegu, Tenasserim and further south.

Family DICRURIDAE.

36. **Chaptia aenea** (Viell.).

O. and B., vol. i, p. 318.
B. M. Cat., vol. iii, p. 244.

(*a*) ♀, Kobo, 400 ft., 1-xii-11. I.M. No. 25279.
(*b*) ♂, Bipani, Dibang Valley, Mishmi Hills, 16-i-12 (*F.M.B.*).

37. **Chibia hottentotta** (Linn.).

O. and B., vol. i, p. 320.
B. M. Cat., vol. iii, p. 235.

(*a*) ♂, Rotung, 1400 ft., 13-iii-12. I.M. No. 25283.

38. **Bringa remifer** (Temm.).

O. and B., vol. i, p. 324.
B. M. Cat., vol. iii, p. 257.

(*a*) ♀, Balek, 24-iii-12. I.M. No. 25288.

Family CERTHIIDÆ.

39. **Certhia discolor** (Blyth).

O. and B., vol. i, p. 331.

(*a*) ♀, Upper Rotung, 6-i-12. I.M. No. 25324.

Family SYLVIIDAE.

40. **Orthotomus sutorius** (Forst.).

O. and B., vol. i, p. 366.
B. M. Cat., vol. vii, p. 215.

(*a*) ♀, Balek, 26-iii-12. I.M. No. 25331.

41. **Cryptolopha affinis** (Hodg.).

O. and B., vol. i, p. 422.
B. M. Cat., vol. iv, p. 398 (part).

(*a*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. No. 25325.

42. **Cryptolopha xanthoschista jerdoni** (Brooks).

O. and B., vol. i, p. 425.
B. M. Cat., vol. iv, p. 398 (part).

(*a*) ♀, Kobo, 400 ft., 1-xii-11. I.M. No. 25312.
(*b*) ♀, Rotung, 1400 ft., 10-iii-12. I.M. No. 25314.
(*c*) ♂, Sadiya, N.-E. Assam, 25-xi-11. I.M. No. 25363.

Over the whole of the extreme N.-E. of the Indian Empire, throughout the western hills of the Assam Valley and Cachar, and the Miri, Dafla and Sub-Himalayan ranges to the north of the Brahmaputra, the grey-headed Flycatcher-Warbler cannot be said to be either typical *xanthoschista* or *jerdoni*, and the birds of the Abor Hills come, as might be expected, into the same category. The three specimens as far as one can tell—one specimen has practically no feathers on the head—in this collection are on the whole nearer *jerdoni* than *xanthoschista*. The two sub-species are very close together and the intermediate range over which the indefinite form extends is greater than the two extremities over which one finds specimens which are easily determined. The Kashmir and Hazara birds appear to be all *xanthoschista*, and the birds of Eastern Assam,

Chittagong, Manipur, Arrakan and the Shan States are all typical *jerdoni*, but over the whole of the immense intervening country it is really hard to say to which race they are most closely allied.

43. **Abrornis superciliaris** (Tick.).

O. and B., vol. i, p. 429.
B. M. Cat., vol. iv, p. 402.

(*a*) Not sexed. Rotung, 1400 ft., 12-iii-12. I.M. No. 25313.

44. **Abrornis albigularis** (Hodg.).

O. and B., vol. i, p. 430.
B. M. Cat., vol. iv, p. 405.

(*a*) ♂, Rotung, 1400 ft., no date. I.M. No. 25315.

Family LANIIDAE.

45. **Lanius tephronotus** (Vigors).

O. and B., vol. i, p. 465.
B. M. Cat., vol. viii, p. 260.

(*a*) ♀, Kobo, 400 ft., 11-xii-11. I.M. No. 25254.
(*b*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 24.

Both of these specimens are immature with the under-surface considerably barred and the eye-streak undeveloped. Specimen (*b*) also has the tail coverts strongly barred; but (*a*), though the younger bird of the two, has these latter immaculate.

46. **Hemipus capitalis** (Maclell.).

O. and B., vol. i, p. 472.
B. M. Cat., vol. iii, p. 306.

(*a*) ♂, Rotung, 1400 ft., 11-iii-12. I.M. No. 25319

47. **Pericrocotus speciosus** (Lath.).

O. and B., vol. i, p. 479.
B. M. Cat., vol. iv, p. 71.
Stuart Baker, B N.H.S.J., vol. xvii, p. 794.

(*a*) ♂, Kobo, 400 ft, 9-xii-11. I.M. No. 25352.
(*b*) ♂, Rotung, March 1912. B.N.H.S No. 52.
(*c*) ♂, Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 55.

These three Minivets are extremely interesting specimens and strongly bear out what I have already noted in the Bombay

Natural History Society's Journal in reference to the impossibility of distinguishing between *speciosus* and *fraterculus*.

In this case we find that No. 25352 is a most typical specimen of the eastern form which was named *fraterculus* by Swinhoe in the Ibis for 1870, and which Oates in the 'Avifauna' accepted as a good species. This specimen is quite typical *fraterculus* as defined by Oates; the colour is a very rich red, the whole of the outer webs of the central tail feathers red and the wing of 3·85″ though the tail is exactly 4″

The two birds sent to the Bombay Society by Dr. Falkiner are on the other hand equally typical specimens of *speciosus*; No. 52 has but little red on the outer tail feathers whilst No. 55 has none, the wing measurement of both is 4·15 and the two tails measure respectively 4·4 and 4·2. Nor does this mean that there is a very wide area over which the two races are indefinite whilst easily divided forms are found on either side of the area, for I have seen specimens from southern Burma which are more *speciosus* than *fraterculus*, and others again from Nepal which are more *fraterculus* than *speciosus*. From the same flock of birds, I have myself more than once obtained specimens referable to the two species, whilst the majority of specimens are half way between the two. I am of opinion that the name *fraterculus* must be reduced to a synonym of *speciosus*, and that it cannot rank even as a sub-species.

48. **Pericrocotus solaris** (Blyth).

O. and B., vol. i, p. 485.
B. M. Cat., vol. iv, p. 82.

(*a*) ♂, between Kalek and Misshing, 15—18-iii-12. I.M. No. 25368.

This specimen agrees with others in the British Museum in having the under parts rather more richly coloured than is the case with the skins from Sikkim and Nepal. The difference, however, is very slight and not altogether constant and is insufficient ground for creating a new sub-species.

49. **Graucalus macii macii** (Less.).

O. and B., vol. i, p. 496.
B. M. Cat., vol. iv, p. 34.

(*a*) ♂, Sirpo, 21-iii-12. I.M. No. 25280.

This is an extraordinarily large bird with a wing of 7·1. The Ceylon bird of this species is very small with a wing averaging very little over 6″ and is worthy of being made a sub-species; it would bear the name *layardi* of Blyth which, though given to a young bird under the impression that the markings of immaturity were those of a new species, is the first name given to a Ceylon bird and will therefore stand. Birds from southern India are a

good deal smaller than those from northern India, but grade into them and thence through North Burma into an equally small form in South Burma.

Sub-family *ARTAMINAE.*

50. **Artamus fuscus,** Vieill.

O. and B., vol. i, p. 498.
B. M. Cat., vol. xiii, p. 11.

(*a*) ♀, Kobo, 400 ft., 29-iii-12. I.M. No. 25356.

Family ORIOLIDAE.

51. **Oriolus melanocephalus** (Linn.).

O. and B., vol. i, p. 506.
B. M. Cat., vol. iii, p. 215.

(*a*) ♂, Kobo, 6-xii-11. I.M. No. 25297.

This is a young bird with the forehead still yellow and the black of the wings well edged with greenish.

52. **Oriolus traillii** (Vigors).

O. and B., vol. i, p. 508.
B. M. Cat., vol. iii, p. 222.

(*a*) Not sexed. Morsing, 1000 ft., 27-i-12. I.M. No. 25273.

This bird, although not sexed, is undoubtedly a young female.

Family STURNIDAE.

53. **Sturnopasta contra** (Linn.).

O. and B., vol. i, p. 542.
B. M. Cat., vol. xiii, p. 57.

(*a*) ♂, Sadiya, N.-E. Assam, 28-xi-11. I.M. No. 25260.

This Myna as far as the supercilia and the markings on the forehead are concerned shows no approach, as might have been expected, to the Burmese sub-species *superciliaris.* It is, however, as is the case with so many birds in this N.-E. corner of India, of a remarkably dark colouration, the back being practically a glossy black with little or no tinge of chocolate in it. There is unfortunately but one specimen collected, which is, however, matched with another from Dikrang in the Museum collection; had there been a series all showing the same depth of blackness, it would certainly have formed a good sub-species. A further series—they

should be easy enough to procure—should be obtained as soon as possible.

Family MUSCICAPIDAE.

54. **Siphia?** (Bechst.).

O. and B., vol. ii, p. 9.
B. M. Cat., vol. iv, p. 161.

(*a*) ♀, Sadiya, 25-xi-11. I.M. No. 25335.

This little Flycatcher is almost certainly *Siphia albicilla*, which is very common both north and south of the Brahmaputra throughout Assam in the winter. *S. parva* has not yet been found in the eastern part of Assam.

55. **Cyornis hyperythrus** (Blyth).

O. and B., vol. ii, p. 15.
B. M. Cat., vol. iv, p. 206.

(*a*) ♂, between Kalek and Misshing, 13—18-iii-12. I.M. No. 25327.

56. **Stoparola melanops** (Vigors).

O. and B., vol. ii, p. 28.
B. M. Cat., vol. iv, p. 438.

(*a*) ♂, no data. B.N.H.S. No. 26.

57. **Culcicapa ceylonensis** (Swain.).

O. and B., vol. ii, p. 38.
B. M. Cat., vol. iv, p. 369.

(*a*) ♂, Upper Rotung, 2150 ft., 6-i-12. I.M. No. 25322.
(*b*) Not sexed. Misshing, 2500 ft., Feb. 1912. B.N.H.S. No. 31.

58. **Niltava sundara** (Hodg.).

O. and B , vol. ii, p. 41.
B. M. Cat., vol. iv, p. 463.

(*a*) ♂, below Damda, 2-ii-12 (*A. Molesworth*). I.M No. 25371.

59. **Niltava macgrigoriae** (Burton).

O. and B., vol. ii, p. 42.
B. M. Cat., vol. iv, p. 465.

(*a*) ♂, Rotung, 1400 ft., 10-iii-12. I.M. No. 25311.
(*b*) ♂, Rotung, 1400 ft., 31-xii-11. I.M. No. 25348.

60. **Hypothymis azurea** (Bodd.).

O. and B., vol. ii, p. 49.
B. M. Cat., vol. iv, p. 277.

(*a*) ♂, no data. B.N.H.S. No. 54.

61. **Chelidorhynx hypoxanthum** (Blyth).

O. and B., vol. ii, p. 51.
B. M. Cat., vol. iv, p. 279.

(*a*) ♂, Rotung, 1400 ft., 4-iii-12. I.M. No. 25317.
(*b*) Not sexed. Kobo, 400 ft., 8-xii-11. I.M. No. 25349.
(*c*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 19.
(*d*) ♂, Bipani, Dibang Valley, Mishmi Hills, 2100 ft., 18-i-12 (*F.M.B.*).

"Bill: upper mandible black, lower yellowish; legs brown, iris dark. Naga names Pongking-lo or Bang-ho-go." (*F.M.B.*).

This little bird was once supposed to be a Flycatcher of high elevations only, but Mr. H. Stevens found it was comparatively common at the foot of the Dafla Hills in winter and Dr. H. N. Coltart obtained it at the foot of the hills near Margherita; there is nothing surprising therefore in its being found as low as 400 ft. at Kobo. The fact of its having been obtained by each collector at so many places upon this expedition shows that it must be comparatively common throughout the Mishmi, Dafla and Abor Hills.

62. **Rhipidura albicollis kempi**, sub-sp. nov.

O. and B., vol. ii, p. 53.
B. M. Cat., vol. iv, p. 317.

(*a*) ♂, Rotung, 7-iii-12. I.M. No. 25342.
(*b*) Not sexed. Kobo, 9-xii-11. I.M. No. 25353.
(*c*) ♂, Upper Rotung, 2150 ft. I.M. No. 25358.

These three specimens are very interesting, their extremely dark colouration at once attracting notice when laid amongst a large series of birds from south of the Brahmaputra. It is exactly matched by a specimen from the Dikrang Valley, in the same district at the foot of the Abor Hills, and is approached by some of the more eastern Nepal skins and by a few from Sikkim. In addition to being darker in colour there is less of a brown tint in the plumage of the Abor birds, the grey black portions showing more as deep ashy than as deep brown. The dimensions do not differ from those of the typical sub-species

The range of the two sub-species would appear to be as follows:—

R. albicollis albicollis. Central Provinces, Bombay, Deccan, western, central and eastern Bengal and northern Orissa; Behar and northern Bengal and Assam, south of the Brahmaputra Valley, but running up into the Duars west of the Teesta Valley. The whole of Burma except, perhaps, the hill ranges to the extreme N. W and Cochin China.

R. albicollis kempi. Eastern Nepal, the Dafla, Mishmi and Abor Hills; Assam from Goalpara in the west to Dibrugarh in the east, north of the Brahmaputra on the hills between Assam and Burma.

I have named the bird after Mr. S. W Kemp, the Zoologist in charge of the zoological work of the expedition, who appears personally to have collected all three specimens obtained.

Family TURDIDAE.

63. **Pratincola torquata przewalskii** (Pleske).

Pratincola maura, O. and B., vol. ii, p. 61.
B. M. Cat., vol. iv, p. 188.
Hartert, D.V.P., p. 709.

(*a*) ♂, Kobo, 400 ft., 1-xii-11. I.M. No. 25354.

Not a very good specimen and therefore it is not easy to say to which of the numerous sub-species, now admitted, this specimen belongs, but it appears to be nearest *przewalskii.*

64. **Henicurus schistaceus** (Hodg.).

O. and B., vol. ii, p. 84.
B. M. Cat., vol. vii, p. 316.

(*a*) ♂, Yembung, 1100 ft., 15-ii-12. I.M. No. 25337.
(*b*) ♂, Rotung, 7-iii-12. I.M. No. 25341.

65. **Henicurus leschenaulti** (Vieill.).

O. and B., vol. ii, p. 86.
B. M. Cat., vol. vii, p. 313.

(*a*) ♂, Misshing, 2000 ft., Feb. 1912. B.N.H.S No. 11.

66. **Microcichla scouleri** (Vigors).

O. and B., vol. ii, p. 88.
B. M. Cat., vol. vii, p. 322.

(*a*) ♀, Yembung, 1100 ft., 15-ii-12. I.M. No. 25336

67. **Chimarrhornis leucocephalus** (Vigors).

O. and B., vol. ii, p. 89.
B. M. Cat., vol. vii, p. 47.

(*a*) ♂, Yembung, 1100 ft., 15-iii-12. I.M. No. 25290.
(*b*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 20.

68. **Ruticilla frontalis** (Vigors).

O. and B., vol. ii, p. 91.
B. M Cat., vol. v, p. 349.

(*a*) Not sexed. Rotung, March 1912. B.N.H.S. No. 39.

This specimen is an unmistakable male.

69. **Ruticilla aurorea leucoptera** (Blyth).

O. and B., vol. ii, p. 93.
B. M. Cat., vol. v, p. 345.
Hartert, D.V.P., p. 72.

(*a*) Not sexed. Rotung, March 1912. B.N.H.S. No. 38.

This Redstart also is a male. The sub-species to which it belongs is undoubtedly *leucoptera*.

70. **Rhyacornis fuliginosus** (Vigors).

O. and B., vol. ii, p. 98.
B. M. Cat., vol. iv, p. 253.

(*a*) ♀, Rotung, 7-iii-12. I.M. No. 25338.
(*b*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. No. 25367.
(*c*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. No. 25369.
(*d*) Not sexed. No data. B.N.H.S. No. 47.

Specimen (*b*) is a female, (*c*) and (*d*) are males. This little Redstart is, of course, very common right into the plains wherever the rivers and streams run clear and fast.

71. **Ianthia rufilata** (Hodg.).

O. and B., vol. ii, p. 106.
B. M. Cat., vol. iv, p. 256.

(*a*) ♂, Endoling, Dibang Valley, Mishmi Hills, about 4500 ft., 4-ii-12 (*F.M.B.*).

"Iris dark brown, bill and legs black" (*F.M.B.*).
This is a young male, not fully adult.

72. **Ianthia hyperythra** (Blyth).

O. and B., vol. ii, p. 108.
B. M. Cat., vol. iv, p. 257.

(*a*) ♂, Upper Rotung, 5-i-12. I.M. No. 25359.
(*b*) ♀, Bipani, Dibang Valley, Mishmi Hills, about 2100 ft., 17-i-12 (*F.M.B.*).

"Bill black, feet very dark brown, iris dark. Naga name Aching-yon or Tsen-tsen-gi." (*F.M.B.*).

This Bush Robin has hitherto been found according to present records only in Sikkim and the Khasi and N. Cachar Hills. Dr. Coltart, however, procured it in Margherita and I have received it from Nepal and the Bhutan Hills above Kamrup, so that the present record practically links it up with the hills south and east.

73. Cittocincla macrura macrura (Gmel.).

O. and B., vol. ii, p. 118.
B. M. Cat., vol. vii, p. 85.

(*a*) ♂, Kobo, 10-xii-11. I.M. No. 25264.

74. Myiophoneus temmincki temmincki (Vigors).

O. and B., vol. i, p. 178.
B. M. Cat., vol. vii, p. 7.

(*a*) Not sexed. Komsing, 25-ii-12. I.M. No. 25277.

It is possible that this genus is not even now placed in its proper position. It certainly should be placed amongst the Turdidae as it is a true Thrush in every way, but exactly where it should go it is difficult to say. Possibly it should be placed somewhere near *Grandala* and *Notodela* together with *Brachypteryx* and *Drymochares* which must also be withdrawn from the Timeliidae and placed amongst the Turdidae.

The present specimen is a typical *temmincki* and quite distinct from the Burmese sub-species *eugenii*.

75. Merula ruficollis (Pall.).

O. and B., vol. ii, p. 130.
B. M. Cat., vol. v, p. 269.

(*a*) ♀, Balek, 23-iii-12. I.M. No. 25296.
(*b*) ♀, Misshing. Feb. 1912. B.N.H.S. No. 30.
(*c*) ♂, Misshing. Feb. 1912 B.N.H.S. No. 49.

Specimen (*a*) appears to be a male

Hartert (Die Vogel Palaarktischen, p. 659 *et seq.*) considers *M. atrogularis* to be a sub-species of *ruficollis*, but I cannot make out where these two sub-species overlap, and I look upon them as perfectly good species always easily distinguished one from the other and having much the same range and migration even if not the same breeding area. The red-throated Ouzel visits the extreme north eastern part of the Indian Empire in enormous numbers in the cold weather and I have seen it in flocks of hun-

dreds in Margherita. It appears not to migrate in company with *atrogularis* and not to follow the same main routes. Thus to the extreme east in Tezpur, Sadiya and Dibrugarh, one will get at least ten *ruficollis* to one *atrogularis*, whilst in North Cachar the exact reverse is the case.

76. **Petrophila erythrogastra** (Vigors).

O. and B., vol. ii, p. 143.
B. M. Cat., vol. v, p. 325.

(*a*) Not sexed. Upper Rotung, 2150 ft., Jan. 1912. I.M. No. 25309. (*M de Courcy*).

This bird is a ♂ in full adult plumage.

77. **Petrophila solitarius pandoo** (Sykes).

O. and B., vol. ii, p. 146.
B. M. Cat., vol. v, p. 316.
Hartert, D.V.P., p. 675.

(*a*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 32.

This bird is also a male and is a fairly typical specimen of the western *solitarius*. Hartert unites *Petrophila* with *Monticola* but, for the present at all events, I prefer to keep them distinct.

Family PLOCEIDAE.

Sub-family *VIDUINAE*.

78. **Uroloncha acuticauda** (Hodg.).

O. and B., vol. ii, p. 184.
B. M. Cat., vol. xiii, p. 356.

(*a*) ♀ , Balek, 26-iii-12. I.M. No. 25334.

Family FRINGILLIDAE.

Sub-family *FRINGILLINAE*.

79. **Haematospiza indica** (Gmel.).

O. and B., vol. ii, p. 209.
B. M. Cat., vol. xii, p 397.

(*a*) and (*b*) No data. B.N.H.S. Nos. 41 and 36.

It is very unfortunate that these two fine finches are without data, for it would have been most interesting to know at what elevation they were obtained as hitherto they have never been found much under 5000 ft. Their being obtained in the Abor Hills links up the two places Nepal and Sikkim in the west and the

Khasi Hills in the east from which the bird has so far been recorded.

80. **Passer rutilans cinnamomea** (Gould).

O. and B., vol. ii, p. 240.
B. M. Cat., vol. xii, p. 325.
Hartert, D.V.P., p. 162.

(*a*) Not sexed. Kalek, 19-iii-12. I.M. No. 25365.
(*b*) Not sexed. Kalek, 19-iii-12. I.M. No. 25364.

Specimen (*a*) is a male and specimen (*b*) is a female. Hartert (*loc. cit.*) shows that *cinnamomea* is only a sub-species of *rutilans*, described from Japan by Temminck in 1829. He (Hartert) also makes a sub-species of the Nepal Cinnamon Sparrow under the name *debilis*, on the grounds of its smaller size, *i.e.* a wing of 70—73 mm. as against 77—79 mm. in *cinnamomea*.

Family HIRUNDINIDAE.

81. **Cotile sinensis** (Gray).

O. and B., vol. ii, p. 273.
B. M. Cat., vol. x, p. 104.

(*a*) ♀, Rotung, 1400 ft., 2-i-12. I.M. No. 25321.
(*b*) Not sexed. Kobo, 30-iii-12. I.M. No. 25328.

This little Martin is *not* a sub-species of *riparia*, differing not only in colouration but also in the comparative length of the wing and tail, as well as in not having the curious tuft of feathers which *riparia* always has at the back of the tarsus. Moreover, their breeding ranges overlap as well as their areas of winter migration, for *riparia* also breeds within Indian limits.

Family MOTACILLIDAE.

82. **Motacilla alba ocularis** (Swin.).

O. and B., vol. ii, p. 289.
B. M. Cat., vol. x, p. 471.

(*a*) Sadiya, N.-E. Assam, 25-xi-11. I.M. No. 25362.

I am very doubtful as to the propriety of reducing this species to be only a sub-species of *alba*. The eye-streak, the distinguishing mark of this Wagtail, is always present, even in young birds, and there does not appear to be any overlapping of the two forms.

83. **Anthus trivialis maculatus** (Hodg.).

O. and B., vol. ii, p. 304.
B. M. Cat., vol. x, p. 547.

(*a*) Not sexed. Kalek, 19-iii-12. I.M. No. 25330.

(*b*) Not sexed. Kobo, 400 ft., 9-xii-11. I.M. No. 25357.
(*c*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 14.

All of these specimens are true *maculatus*, and here again it is doubtful whether the differences between *maculatus* and *trivialis* are not more than sub-specific. Both birds breed in the Himalayas it is said, though it is not beyond doubt that *trivialis* does so.

84 **Anthus richardi richardi** (Vieill.).

O. and B., vol. ii, p. 307.
B. M. Cat., vol. x, p. 564.

(*a*) ♀, Sadiya, in cleared ground, 25-xi-11. I.M. No. 25361.

Family NECTARINIIDAE.

Sub-family *NECTARINIINAE.*

85. **Aethopyga seheriae seheriae** (Tickell).

O. and B., vol. ii, p. 348.
B. M. Cat., vol. ix, p. 18.

(*a*) Not sexed. Pasighat. No date. I.M. No. 25377.

This bird, a male in full plumage, agrees well with Oates' *andersoni*, but one would not expect this Sunbird, since suppressed, to appear in this region, his birds having been obtained in Bhamo. The specimen obtained is in a very battered condition, but a good series might well prove interesting; the wing is only about 2·1″

86. **Aethopyga saturata** (Hodg.).

O. and B., vol. ii, p. 354.
B. M. Cat., vol. ix, p. 15.

(*a*) ♂, Rotung, 2-i-12. I.M. No. 25347.
(*b*) ♂, Balek, 26-iii-12. I.M. No. 25366.
(*c*) Not sexed and no data. I.M. No. 25374.
(*d*) Not sexed. Feb. 1912. B.N.H.S. No. 4.
(*e*) No data. B.N.H.S. No. 34.

Specimens (*c*) and (*d*) are males and (*e*) an adult female.

Sub-family *ARACHNOTHERINAE.*

87. **Arachnothera magna** (Hodg.).

O. and B., vol. ii, p. 369.
B. M. Cat., ix, p. 105.

(*a*) Rotung, 10-iii-12. I.M. No. 25343.
(*b*) Rotung, 8-iii-12. I.M. No. 25344.

Family PITTIDAE.

88. **Pitta nepalensis nepalensis** (Hodg.).

O. and B., vol. ii, p. 389.
B. M. Cat., vol. xiv, p. 414.

(*a* Not sexed. Rotung, 1400 ft., 8-iii-12. I.M. No. 25301.
(*b*) No data. B.N.H.S. No. 51 (*Dunbar*).

On specimen (*b*) Sir George Duff Dunbar has the following interesting notes: "The Abor name for this bird is 'Pajuk.' It appears in their mythology as one of the earlier mates of *Tani*, the first man, who married the creatures of the forest from the leech upwards in search for a wife. This bird possessed the objectionable habits of the Harpy which dissolved this particular partnership. At last the Sun gave him a woman. The Hill Miris are known to have a similar legend."

Order **PICI.**

Family PICIDAE.

Sub-family *PICINAE.*

89. **Gecinus chlorolophus** (Vieill.)

O. and B., vol. iii, p. 23.
B. M. Cat., vol. xviii, p. 59.

(*a*) Not sexed and no data. B.N.H.S. No. 42.

The specimen obtained is a male.

90. **Chrysophlegma flavinucha** (Gould).

O. and B., vol. iii, p. 28.
B. M. Cat., vol. xviii, p. 127.

(*a*) Not sexed. Between Kalek and Misshing, 15—16-iii-12. I.M. No. 25308.

This specimen is a male.

91. **Gecinulus grantia** (Maclell.).

O. and B., vol. iii, p. 30.
B. M. Cat., vol. xviii, p. 134.

(*a*) Not sexed. Rotung, March 1912. B.N.H.S. No. 13.

92. **Dendrocopus macii macii** (Vieill.).

O. and B., vol. iii, p. 39.
B. M. Cat., vol. xviii, p. 260.

(*a*) ♀, Kobo, 400 ft., 1-xii-11. I.M. No. 25263.
(*b*) ♀, Rotung, 1400 ft., 13-iii-12. I.M. No. 25320.

Specimen (*a*) is really a male and has been wrongly sexed. Both these specimens are typical *macii* whereas in the Khasi Hills I obtained *D. m. atratus*. Several birds, however, got by myself on their nests both in Gauhati and Dibrugarh were all *macii*.

93. **Pyrrhopicus pyrrhotis** (Hodg.).

O. and. B., vol. iii, p. 50.
B. M. Cat., vol. xviii, p. 380.

(*a*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. No. 25274.

This specimen is a male.

Sub-family *PICUMNINAE*.

94. **Sasia ochracea** (Hodg.).

O. and B., vol. iii, p. 77.
B. M. Cat., vol. xviii, p. 555.

(*a*) Not sexed. Rotung, March 1912. B.N.H.S. No. 7.

Family CAPITONIDAE.

95. **Megalaema marshallorum marshallorum** (Swinhoe).

O. and B., vol. iii, p. 84.
B. M. Cat., xviii, p. 53.

(*a*) ♀, Rotung, 1400 ft., 2-i-12. I.M. No. 25276.

This specimen has the upper back, scapulars and lesser wing coverts a duller, darker maroon-brown than any specimen in the British Museum, and there are also practically no pale streaks on the upper back. The skin is a fairly good one and the differences do not appear to be in any way due to faulty skinning, at the same time it is hardly safe to create a sub-species on the strength of this single specimen. In measurements it agrees with the normal bird.

96. **Cyanops asiatica asiatica** (Lath.)

O. and B., vol. iii, p. 92.
B. M. Cat., vol. xix, p. 62.

(*a*) ♂, Kobo, 400 ft., 9-xii-11. I.M. No. 25275.
(*b*) ♀, Rotung, 1400 ft., 9-iii-12. I.M. No. 25255.
(*c*) ♂, Rotung, 1400 ft., 13-iii-12. I.M. No. 25292.

Like so many birds in this humid corner of India all three of these specimens are rather darker than most specimens from elsewhere, but none of them show any trace of the rich red markings of *C. a. rubescens* from the higher ranges of North Cachar and the Khasi and Naga Hills.

97. **Cyanops franklini franklini** (Blyth).

O. and B., vol. iii, p. 96.
B. M. Cat., vol. xix, p. 69.

(*a*) ♂, Komsing, 24-ii-12. I.M. No. 25299.
(*b*) Not sexed. Rotung, March 1912. B.N.H.S. No. 25.
(*c*) Not sexed. Rotung, March 1912. B.N.H.S. No. 37.
(*d*) Not sexed. Misshing, 2000 ft., Feb. 1912. B.N.H.S. No. 53.

All these four birds are typical *franklini* and show no approach to the Burmese *C. f. ramsayi*.

Order **ANISODACTYLI.**

Sub-order ***MEROPES.***

Family MEROPIDAE.

98. **Melittophagus swinhoii** (Hume).

O. and B., vol. iii, p. 114.
B. M. Cat., vol. xvii, p. 55.

(*a*) ♂, Kobo, 400 ft., 29-iii-12. I.M. No. 25360.

Sub-order ***UPUPAE.***

Family UPUPIDAE.

99. **Upupa epops indica** (Reich.).

O. and B., vol. iii, p. 161.
B. M. Cat., vol. xvi, p. 10.

(*a*) No data. B.N.H.S. No. 12.

This is a very large bird, the wing being nearly 5·8″ (147·3 mm.) but there is practically no white on the crest, there being only a tinge of this on one or two of the longest feathers. The bill is over 2″ (52·20 mm.) from front to tip. The breast and under parts are typical *indica*.

Order TROGONES.

Family TROGONIDAE.

100. **Harpactes erythrocephalus** (Gould).

O. and B., vol. iii, p. 200.
B. M. Cat., vol. xvii, p. 448.

(*a*) No data. B.N.H.S. No. 5.
(*b*) Not sexed. Rotung, March 1912. B.N.H.S. No. 16.
(*c*) Not sexed. Rotung, March 1912. B.N.H.S. No. 44.

All three of these specimens are males. No. 16 is very much darker above than either of the other two, which are about equal to the average bird. Had all three been as dark as this bird, it would certainly have been justifiable to consider it a new sub-species, and this is rather a good example of the danger of making new species or sub-species from a single specimen.

Family CUCULIDAE.

Sub-family *PHOENICOPHAINAE.*

101. **Rhopodytes tristis** (Less.).

O. and B., vol. iii, p. 232.
B. M. Cat., vol. xix, p. 386.

(*a*) No data. B.N.H.S. No. 2.

This specimen, with which most unfortunately there is no data, is a very dark bird and has the chin and throat almost concolourous with the breast, instead of very decidedly paler as is usually the case. The forehead also is very dark and the striae well developed, whilst the whole prevailing tint of the plumage is not only darker but is of a purer grey and less suffused with rusty than any other specimen I have ever seen. There is a good series of this Cuckoo in the British Museum, but this Abor bird is quite different to any of them and should subsequently obtained specimens prove to be like it, it will certainly require to be raised to a sub-species. The plumage of *Rhopodytes* does not vary with the seasons though, of course, newly moulted birds are darker and brighter than birds just about to moult whose feathers have become slightly bleached.

102. **Centropus sinensis** (Steph.).

O. and B., vol. iii, p. 230.
B. M. Cat., vol. xix, p. 343.

(*a*) No data. (*M de Courcy*). I.M. No. 25376.

103. **Centropus bengalensis** (Gmel.).

O. and B., vol. iii, p. 243.
B. M. Cat., vol. x, p. 352.

(*a*) Not sexed. Abor Hills, 16-iii-12. Collected by Capt. M. de Courcy.

Order **PSITTACI.**

Family PSITTACIDAE.

104. **Palaeornis fasciatus** (Mull.).

O. and B., vol. iii, p. 256.
B. M. Cat., vol. xx, p. 464.

(*a*) ♀, Kobo, 400 ft., 29-iii-12. I.M. No. 25289.

This specimen has been wrongly sexed for it is an undoubted male.

Order **ACCIPITRES.**

Family FALCONIDAE.

Sub-family *FALCONINAE.*

105. **Buteo desertorum** (Daud.).

O. and B., vol. iii, p. 393.
B. M. Cat., vol. i, p. 180.

(*a*) No data. B.N.H.S. No. 8.

This bird is evidently a male with a wing of 14·5″ (265·4 mm.).

106. **Tinnunculus alaudarius alaudarius** (Linn.).

O. and B., vol. iii, p. 428.
B. M. Cat., vol. i, p. 425.

(*a*) ♀, Sadiya, 26-xi-11. I.M. No. 25298.

This is a somewhat worn specimen with faded plumage, but appears to belong to the migratory form.

Order **COLUMBAE.**

Family COLUMBIDAE.

Sub-family *CARPOPHAGINAE.*

107. **Ducula insignis insignis** (Hodg.).

O. and B., vol. iv, p. 21.
B. M. Cat., vol. xxi, p. 216.

(*a*) Not sexed. Pasighat, 600 ft., no date. I.M. No. 25372.
(*b*) Not sexed. Kobo, 400 ft., 5-xii-11. I.M. No. 25272.

These specimens are quite typical *insignis*, showing no approach to *D. i. griseicapilla* as do a good many of the birds on the south of the Brahmaputra and in the Surma Valley.

Order **GALLINAE.**

Sub-order ***ALECTOROPODES.***

Family PHASIANIDAE.

108. **Gallus ferrugineus** (Gmelin).

O. and B., vol. iv, p. 74.
B. M. Cat., vol. xxii, p. 344.

(*a*) ♂, Yembung, 1100 ft., 17-ii-12. I.M. No. 25284.
(*b*) ♀, Yembung, 1100 ft., 19-ii-12. I.M. No. 25294.
(*c*) ♂, No data. B.N.H S. No. 1.
(*d*) ♂, No data. B.N.H.S. No. 3.

109. **Arboricola rufigularis rufigularis** (Blyth).

O. and B., vol. iv, p. 120.
B. M. Cat., vol. xxii, p. 212.

(*a*) Not sexed. Between Kalek and Misshing, 15—18-iii-12. I.M. No. 25302.

This specimen is a quite typical *rufigularis*, not *intermedia*, and has a very well-developed black band below the rufous gorget. I have already noted (B.N.H.S. Journal, vol. xi) that *intermedia* is but a sub-species of *rufigularis*, and that in the hills south of the Brahmaputra many specimens are intermediate between the two races.

Order **LIMICOLAE.**

Family CHARADRIIDAE.

Sub-family *TOTANINAE.*

110. **Totanus ochropus** (Linn.).

O. and B., vol. iv, p. 262.
B. M. Cat., vol. xxiv, p. 437.

(*a*) ♀, Kobo, 400 ft., 29-iii-12. I.M. No. 25257.

ORDER **ANSERES.**

Family ANATIDAE.

Sub-family *MERGINAE.*

111. **Merganser castor** (Linn.).

O. and B., vol. iv, p. 469.
B. M. Cat., vol. xxvii, p. 472.

(*a*) ♂, Kobo, 400 ft., 11-xii-11. I.M. No. 25285.

This specimen is a fully adult female and has probably been marked as a male through a slip.