REPORT ON A COLLECTION OF BIRDS FROM THE BENGAL DUARS AND THE TISTA VALLEY MADE IN THE WINTER OF 1938, WITH NOTES ON SPECIMENS IN THE INDIAN MUSEUM.

By M. L. ROONWAL, M.Sc., Ph.D. (Cantab.), Zoological Survey of India, Calcutta.

CONTENTS.

		CONTENT	. 			-
I.	Introduction	•	••	•••		Page. 281
	Systematic Account		••	• •	••	283
	(A) Ord. Passeres	• •		••		283
	Subord. Diacromyodi	• •		• •	• •	283
	1. Fam. Corvidae	••	• • •	• •	• •	283
	2. Fam. Timaliidae	• •	• •	• •	• •	284
	3. Fam. Pycnonotidae	••		••	••	285
	4. Fam. Turdidae		• •	• •	••	287
	5. Fam. Muscicapidae	••	• •	• •	••	290
	6. Fam. Laniidae	• •	• •	••		292
	7. Fam. Artamidae	• •	• •	• •		293
	8. Fam. Dicruridae	• •	• •	••	• •	294
	9. Fam. Oriolidae	• •	• •	• •		296
	10. Fam. Sturnidae	• •	• •	• •	• •	296
	11. Fam. Ploceidae	• •	••	• •	••	297
	12. Fam. Fringillidae	• •	• •	• •	• •	297
	13. Fam. Motacillidae		• •	• •		298
	(B) Ord. Coraciiformes	• •	••	••		300
	(a) Subord. Pici	••	• •	• •	• •	300
	14. Fam. Picidae	• •	••	••	• •	300
	15. Fam. Capitonidae	• •	• •	• •	• •	302
	(b) Subord. Coracii	• •	• •	• •	••	303
	16. Fam. Coraciidae	• •	• •	• •	• •	303
	(c) Subord. Striges	••	• •	• •	••	304
	17. Fam. Asionidae	••	• •	• •	• •	304
	(C) Ord. Accipitres			••	• •	305
	18. Fam. Falconidae	••	• •	• •	• •	305
		••	• •			306
	(D) Ord. Columbae 19. Fam. Columbidae	• •	• •	• •	• •	306
		• •	• •	• •	••	307
	(E) Ord. Charadriiformes	• •	• •	• •	••	307 307
	Subord. Limicolae	• •	• •	• •	••	307 307
	20. Fam. Charadriidae	• •	• •	• •	• •	3U 1

I. Introduction.

In November and December 1938 a party of the Zoological Survey of India under the leadership of Dr. S. L. Hora made a collection of bird skins from the Bengal Duars and the Tista Valley. The Director kindly placed the collection at my disposal for report. The birds in

the collection comprise 20 families, 30 genera and 32 species and subspecies. Departures, either in coloration or in measurements, from the recognised characters of the races have been described. Under each species, notes regarding its representation in the Indian Museum collections are given, and its distribution discussed, which in some cases has to be considerably extended on that basis.

The Bengal Duars and the Tista Valley lie at the base of the Himalayan Range and comprise a well-forested area studded with streamlets. The places visited lie in the Darjeeling and Jalpaiguri Districts, and since many of them are obscure and not shown in ordinary maps, their approximate geographical positions are given below. The spellings employed are those given in the latest (1936) Degree Sheets issued by the Survey of India Department.

LOCALITY.	LATITUDE.	Longitude.
(A) Darjeeling District—		
1. Siliguri	26° 43′ N.	88° 26′ E.
2. Sivok Ghāt (on R. Tista, near Sivok Rail-		
way Station)	26° 52′ N.	88° 29′ E.
3. Naksalbāri	26° 40′ N.	88° 12′ E.
4. Khāribāri	26° 33′ N.	88° 12′ E.
(B) Jalpaiguri District—		
5. Eastern Bank of R. Tista (between Sivok		
and Bagrākot)	26° 52′ N.	88° 32′ E.
6. Mongpong (on R. Tista, near Sivok)	26° 53′ N.	88° 32′ E.
7. Gish (on R. Gish, near Forest Rest House)	26° 55′ N.	88° 36′ E.
8. Barrākholā	26° 55′ N.	88° 47′ E.

For each bird its Registered Number in the collections of the Zoological Survey of India (Indian Museum), the place and date of collection and its measurements (in millimetres) are given. The following abbreviations have been used throughout:—

- No., Registered Number of specimen in the Zoologial Survey of India (Indian Museum).
- C., Length of culmen.
- L., Total body length.
- Tl., Length of tail.
- Tr., Length of tarsus.
- W., Length of wing.

For each species or subspecies, only two synonymies are given, viz., the earliest reference, and a reference to Stuart Baker in the Fauna Br. India, Birds (2nd ed.), vols. I-VIII, 1922-30. In cases, however, where an important paper or monograph dealing with the species has appeared since Stuart Baker's work, the synonymy employed therein is also given. In regard to nomenclature, I have followed Stuart Baker throughout, except in cases where he has been definitely shown to be in the wrong.

I am greatly indebted to Dr. Baini Prashad, D.Sc., F.N.I., etc, Director, Zoological Survey of India, for ready counsel and much

kindness during the course of this work. To Mr. M. N. Acharji, M.Sc., Assistant in the Zoological Survey, my thanks are due for some assistance in the identification of the birds.

II. SYSTEMATIC ACCOUNT.

(A) Order PASSERES.

Suborder DIACROMYODI.

1. Family CORVIDAE.

Genus Dendrocitta Gould, 1833.

Dendrocitta vagabunda vagabunda (Latham), 1790.

(The Bengal Tree Pie.)

1790. Coracias vagabunda, Latham, Index Ornith., p. 171. (India).

1922. Dendrocitta rufa vagabunda, Stuart Baker, Fauna Br. India, Birds (2nd ed.) I, p. 50.

1932. Dendrocittà vagabunda vagabunda, Whistler & Kinnear, Journ. Bombay Nat. Hist. Soc. XXXV, p. 515.

No. 26403. Q. (Khāribāri. Dec. 7, 1938.)

Measurements (mm.): L.-395; W.-150; Tl.-250; Tr.-35; C.-26.

Notwithstanding the revision of this Tree Pie by Stuart Baker¹, there remains a great deal of confusion in the recognition of the various Indian races. Stuart Baker distinguishes five races, viz., rufa, vaqabunda, saturatior, kinneari and sclateri. The differences on which some of these races are based are insignificant and unrecognisable. Ticehurst² recognises only three Indian races of this Tree Pie, viz., vagabunda, pallida and saturatior. Kinnear & Whistler³ express their dissatisfaction with both groupings. They point out in a later communication4 that the name Dendrocitta rufa should be changed to D. vagabunda on the ground of name rufus being preoccupied. They divide D. vagabunda into four Indian races as follows:—D. vagabunda vagabundaLatham (Outer Eastern Himalayas, Nepal, Assam); D. v. pallida Blyth (Outer Western Himalayas, North-West Frontier Province, Punjab, Rajputana, Sind); D. v. parvula [nom. nov. for Corvus rufus Latham] (West Coast from South Kanara to Cape Comorin); and D. v. vernayi Kinnear & Whistler (South-East India south of the Godavari, South-East Hyderabad, Mysore and the Nilgiris). A preliminary examination of the fine series of skins in the Indian Museum does not fully support this division and suggests other complications, but pending a proper revision of the species, I tentatively adopt the four races of Kinnear & Whistler.

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) I, pp. 48-51 (1922).

² Ticehurst, C. B., Ibis IV (11th Ser.), pp. 537, 538 (1922).

³ Kinnear, N. B. and Whistler, H., Journ. Bombay Nat. Hist. Soc. XXXIV, pp. 391, 392 (1930).

Whistler, H. and Kinnear, N. B., Journ. Bombay Nat. Hist. Soc. XXXV, pp. 514-516 (1932).

2. Family TIMALIIDAE.

Subfamily TIMALIINAE.

Genus Mixornis Hodgson, 1842.

Mixornis gularis rubricapilla (Tickell), 1833.

(The Yellow-breasted Babbler.)

1833. Motacilla rubricapilla, Tickell, Journ. Asiat. Soc. Bengal II, p. 576. (Manbhum, East Bihar).

1922. Mixornis rubricapilla rubricapilla, Stuart Baker, Fauna Br. India, Birds (2nd ed.) I, p. 273. [Corrected to M. gularis rubricapilla in vol. VIII, p. 605 (1930).]

No. 26404. Unsexed (probably \mathfrak{P}). (Bengal Duars. Nov.-Dec., 1938.)

Measurements (mm.):—L.-119; W.-56; Tl.-53; Tr.-20.5; C.-11.

This bird is represented in the Indian Museum by some 21 skins from the following areas:—Nepal; Manbhum in East Behar; Assam; Chittagong in South Bengal; and from practically the whole of Burma including the Shan States, Bhamo and the Mergui Archipelago.

Three specimens of the Malayan race M. g. pileata obtained from Tenasserim (South Burma) and Perak (North Malaya Peninsula) are also present in the Indian Museum. They are easily distinguishable from the race rubricapilla by their deep chestnut-rufous crown and the heavier stripes on fore-neck and breast.

The race M. g. minor (Gyldenstolpe's Babbler), said to occur in Siam and Eastern Central Burma, is not represented in the Museum.

Subfamily LEIOTRICHINAE.

Genus Aegithina Vieillot, 1816.

Aegithina tiphia tiphia (Linnaeus), 1758.

(The Common Iora.)

1758. Motacilla tiphia, Linnaeus, Syst. Nat. (10th ed.) I, p. 186. (Bengal).
1922. Aegithina tiphia tiphia, Stuart Baker, Fauna Br. India, Birds (2nd ed.) I, p. 340.

No. 26405. Q. (Khāribāri. Dec. 6, 1938.)

Measurements (mm.):—L.-132; W.-65; Tl.-55; Tr.-17; C.-13.

The bird is represented in the Indian Museum by a fine series of some 73 skins obtained from Bengal, the United Provinces, Orissa, Ahmadabad in the Bombay Presidency, Assam, Burma including the Mergui area, and the Malay Peninsula.

It is also said to occur in Siam and Annam and in Khorasan (Iran), but is not found in North-Western India.

The allied Central Indian race A. t. humei Stuart Baker (1922) is also well represented in the Museum. Stuart Baker gives its

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) I, p. 343 (1922).

distribution as follows:—South Central India, roughly embracing Southern and Western Rajputana, the Central Provinces and the United Provinces south of the Ganges. In the Museum we have specimens also from the Deccan including the Shevaroy Hills, Madura, Mangalore District and Travancore, which seem to belong to the race humei, so that the range given by Stuart Baker needs extension.

3. Family Pycnonotidae.

Genus Molpastes Hume, 1873.

Molpastes cafer bengalensis Blyth, 1845.

(The Bengal Red-vented Bulbul.)

1845. Molpastes bengalensis, Blyth, Journ. Asiat. Soc. Bengal XIV, p. 566. (Bengal).

1922. Molpastes haemorrhous bengalensis, Stuart Baker, Fauna Br. India, Birds (2nd ed.) I, p. 387. [Corrected to Molpastes cafer bengalensis in vol. VIII, pp. 613, 614 (1930).]

No. 26406. S. (Siliguri. Nov. 15, 1938.)

Measurements (mm.): L.-196; W.-98; Tl.-100; Tr.-29; C.-16.

The bird here recorded has a blackish-brown plumage. The glossy black of the crown reaches the hind-nape and even fore-back and is not sharply defined from the dark brown of the back, unlike the race burmanicus in which the black not only does not extend to the hind-nape but is also sharply defined from the brown of the back. The black of the head below gradually shades into the blackish-brown of the fore-breast. The ear-coverts are glossy dark chocolate-brown. In wing length (98 mm.), however, the bird resembles burmanicus (W.—91 to 106 mm.) rather than bengalensis (W.—103 to 111 mm.) which is the largest Indian race of the species (Stuart Baker¹).

This race is represented in the Indian Museum by 44 specimens from the following areas:—Dehra Dun; the Nepal Valley; Darbhanga; Darjeeling; Calcutta; Dacca; and the Garo Hills, Sylhet, Cachar and Kobo in Assam. There is a male specimen (No. 3574) apparently belonging to this race from Bilaspur (Central Provinces?), but the date and the collector are unrecorded.

The closely allied race M. c. burmanicus is also well represented in the Museum, the birds having been obtained from Cachar (Assam), Shan States, Upper Burma, Mandalay and Arakan. There is an interesting albino specimen (No. 25431), apparently of this race, from Maymyo in Burma. This bird is pure white except for the red under-tail coverts, melanin being entirely suppressed; the beak and legs also do not contain any trace of black.

The other five Indian races of the Red-vented Bulbul, viz., cafer, pallidus, nigripileus, chrysorrhoides and intermedius, are also present in the Indian Museum collections.

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) I, p. 388 (1922).

Genus Elathea Gestel, 1848.

Elathea jocosa emeria (Linnaeus), 1766.

(The Bengal Red-whiskered Bulbul.)

1766. Lanius emeria, Linnaeus, Syst. Nat. (12th ed.) I, p. 137. (Bengal).
1922. Otocompsa emeria emeria, Stuart Baker, Fauna Br. India, Birds (2nd ed.)
I. p. 394. [Corrected to Elathea jocosa emeria in vol. VIII, p. 614
(1930).]

No.	G	Locality.	Date (1938).	Measurements (mm.).					
NO.	Sex.			L.	w.	Tl.	Tr.	C.	
26407	₫	Eastern bank of R. Tista (between Sivok and Bagrākot).	Nov. 17	180	89	92	23	14	
26408	ð	Gish	Nov. 22	180	93	88	25	13	
26409	(?)	Barrākholā	Nov. 25	168	89	82	24	15	
26410	ే	Khāribāri	Dec. 7	188	92	90	23	15	

In all the four specimens the tips of the rectrices are pure white, sometimes touched with light grey; they are not fulvous white as mentioned by Stuart Baker¹.

All the three Indian races of this bird, viz., emeria, fuscicaudata and peguensis, are represented in the Indian Museum. Of the race emeria there are specimens from Bengal and from Manipur, South Sylhet and the Darrang District in Assam; of fuscicaudata from South-Western Rajputana (Mt. Abu), Bombay Presidency (Khandalla) and South India (Shevaroy Hills, Ootacamund, Bhoura, South Mangalore and Travancore); and of peguensis from the Andamans (including the Viper Island), South-Western Burma (Arakan), Upper Burma (Shuaykoo, Bhamo and Ponsee?), Central Burma (South Shan States), and South Burma (Moulmein, Mergui and Tenasserim). This distribution of peguensis slightly extends the northern range of the bird as defined by Stuart Baker² who does not include Bhamo.

Elathea flaviventris flaviventris (Tickell), 1833.

(The Black-crested Yellow Bulbul.)

1833. Vanga flaviventris, Tickell, Journ. Asiat. Soc. Bengal II, p. 573. (Dholbhum, South-East Bihar).

1922. Otocompsa flaviventris flaviventris, Stuart Baker, Fauna Br. India, Birds (2nd ed.) I, p. 397. [Corrected to Elathea flaviventris flaviventris in vol. VIII, p. 615 (1930.)]

No. 26411. 3. (Barrākholā. Nov. 24, 1938.)

Measurements (mm.):—L.-184; W.-89; Tl.-95; Tr.-18; C.-14.

Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) I, p. 395 (1922).
 Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) I, p. 397 (1922).

This bird is represented in the Indian Museum by an excellent series of 31 specimens from the following localities:—Nepal; practically the whole of Assam and Burma, including Mergui and Tenasserim; and from Pasighat in the Abors area in South Tibet (?). There are no specimens from Siam and Yunnan. The smaller race minor, said to occur in Peninsular Burma and Siam and throughout the Malay Peninsula, is not represented in the Museum.

4. Family TURDIDAE.

Subfamily BRACHYPTERYGINAE.

Genus Heteroxenicus Sharpe, 1902.

Heteroxenicus nipalensis nipalensis (Horsfield & Moore), 1854.

(The Nepal Short-wing.)

1854. Brachypteryx nipalensis, Horsfield & Moore, Cat. Birds Mus. East India Coy. I, p. 397. (Nepal).

1924. Heteroxenicus nipalensis nipalensis, Stuart Baker, Fauna Br. India, Birds (2nd ed.) II, p. 19.

No. 26412. Unsexed (probably \mathfrak{P}). (Gish. Nov. 22, 1938.)

Measurements (mm.):—L.-122; W.-70; Tl.-45; Tr.-26; C.-16.

Unfortunately, the specimen is unsexed. I regard it as a probable female because of its ferruginous olive-brown upper plumage; in the males the upper plumage is usually deep slate-blue. Stuart Baker¹ observes: "Birds south of the Brahmaputra and in the extreme East of Assam only differ from those of the West in that the males are like the females and never put on the blue plumage except in very rare cases, and even then, as a rule, only partially "Since the specimen recorded here was shot rather close to the above area, although to the west of it, the present probable sexing cannot be regarded with full satisfaction. Authentically sexed specimens are essential to determine the precise range of this interesting geographical variation in which one of the sexes (male in the present case) is alone affected.

Some remarks are necessary with regard to the status of *Heteroxenicus nipalensis*, *H. cruralis* and the monotypic *Brachypteryx major* as recognised by Stuart Baker². Ticehurst³ has very recently criticised Stuart Baker and expressed agreement with other writers who unite these three birds into a single genus with the specific names *nipalensis*, *cruralis* and *major*. In support of his contention Ticehurst states that Stuart Baker's sharp distinction between forms with shorter tarsi and longer tail (*Brachypteryx*) and those with longer tarsi and shorter tails

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) II, p. 19 (1924).

² Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) II, pp. 9-21 (1924).

³ Ticehurst, C. B., Ibis III (14th Ser.), p. 349 (1939).

(Heteroxenicus) cannot be maintained because of intergradation, as shown by the following table:—

Species.	Percentage of tarsus to wing length.	Percentage of tail to wing length.
major	36-39	79-82
cruralis	40-47	65-74
nipalensis	41-46	56-61

It is of interest to note that the bird here recorded, which, because of colour and other characteristics, I regard as *H. nipalensis nipalensis*, shows a tarsus: wing percentage of 37 and a tail: wing percentage of 64. Thus, while in the latter respect it falls under the *nipalensis* or cruralis group of Ticehurst, in the former respect it belongs to the major group, showing thereby that much reliance cannot be placed on these percentages.

The conclusion of Ticehurst is shared by Rothschild¹, Robinson², and Delacour & Jabouille³. Nevertheless, for the sake of uniformity, I consider it preferable to follow Stuart Baker until a thorough revision of the Short-wings of India and "Greater India", which is

greatly needed, is forthcoming.

The genus Heteroxenicus is very poorly represented in the Indian Meseum collections. Of the five Indian species recognised by Stuart Baker⁴, only three are represented, viz., H. nipalensis nipalensis, H. sinensis and H. stellatus. Of H. nipalensis nipalensis there are five specimens (probably two males and three females) from Sikkim, Darjeeling, North Cachar, and Garo Hills. The upper plumage of an authentically sexed female (No. 22987) of nipalensis collected by E. C. S. Baker at Hungrum (North Cachar, Assam), on July 17, 1893, is warm russet-brown. A sexed male of nipalensis (No. 10492) from Sikkim has the whole of the upper plumage deep smoky-slate. Of H. sinensis there are only two unsexed specimens (both fulvous-brown and, therefore, apparently females), one from Cachar in Assam and the other from Ponsee (?) in Kahyen Hills, Upper Burma. Of H. stellatus there is only one specimen (No. 18326) from Ginatong in Sikkim.

Subfamily SAXICOLINAE.

Genus Saxicola Bechstein, 1802.

Saxicola torquata indica (Blyth), 1847.

(The Indian Bush-Chat.)

1847. Pranticola indica, Blyth, Journ. Asiat. Soc. Bengal XVI, p. 129. (India, Calcutta).

1924. Saxicola torquata indica, Stuart Baker, Fauna Br. India, Birds (2nd ed.) II, p. 28.

¹ Rothschild, Lord, Novitat. Zool. XXXIII, p. 270 (1926).

² Robinson, H. C., Birds Malay Penin. II, p. 220 (1928).
3 Delacour, J. and Jabouille, P., Oiseaux l'Indochine Française III, p. 100 (1931).
4 Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) II, pp. 16-21 (1924).

No.	Sex.	Locality.	Date (1938).	Measurements (mm.).					
		Hotaney.		L.	w.	TI.	Tr.	c.	
26413	ð	Mongpong	Nov. 17	122	72	57	24	10	
26414	ያ (የ)	Naksalbāri	Dec. 2	122	69	53	24	11	

The bird No. 26414, given here as " \mathcal{Q} (?)", was sexed as a male by the collector. In plumage and other characters it agrees closely with the female of *Saxicola torquata indica*, and I think the sexing of it as a male was probably a mistake.

S. t. indica has a wide distribution in India, extending from the Himalayas in the north to Mysore in the south. It breeds in the Himalayas, Western Siberia, Transcaspia, Turkestan and Iran, and visits the Indian plains only in winter. The bird is represented in the Indian Museum by a fine series of over 100 specimens from all over the North Indian range; there are no specimens from the southern range (Mysore, Travancore, Andaman Islands) of the bird. A few specimens from Chitral, Yarkand, Afghanistan and Transcaspia do not seem to differ from the birds recorded from India proper.

Other Indian races of this species, viz., przewalskii, stejnegeri and leucura, are poorly represented in the Museum.

Subfamily PHOENICURINAE.

Genus Chaimarrornis Hodgson, 1844.

Chaimarrornis leucocephala (Vigors), 1830.

(The White-capped Redstart.)

1830. Phoenicura leucocephala, Vigors, Proc. Zool. Soc. Lond., p. 35. (Himalayas).

1924. Chaimarrhornis leucocephala Stuart Baker, Fauna Br. India, Birds (2nd ed.) II, p. 79. [Corrected to Chaimarrornis leucocephala in vol. VIII, p. 621 (1930).]

No. 26415. Unsexed. (Bengal Duars. Nov.-Dec., 1938.)

Measurements (mm.):—L.-161; W.-92; Tl.-80; Tr.-32; C.-13.

This Redstart is represented in the Indian Museum by a series of some 35 specimens from the following localities:—Kafiristan-Chitral area, Kashmir (including Gilgit), Simla Hills, Chamba (North East Punjab), Garhwal, Sikkim, Nepal, Darjeeling, the Abors country (North East Assam), and Burma. The series does not exhibit any striking geographical variation in colour except that birds from the higher altitudes (Gilgit, etc.) are somewhat paler than those from lower areas. The distribution of this bird also extends to Baluchistan and Afghanistan on the west and to the Shan States, Siam, Yunnan, Setchuan and Yangtse on the east, but specimens from these areas are not represented in the Indian Museum.

Subfamily TURDINAE.

Genus Copsychus Wagler, 1827.

Copsychus saularis saularis (Linnaeus), 1758.

(The Indian Magpie-Robin.)

1758. Gracula saularis, Linnaeus, Syst. Nat. (10th ed.) I, p. 109. (Asia, Bengal).
1924. Copsychus saularis saularis, Stuart Baker, Fauna Br. India, Birds (2nd

ed.) II, p. 113.

No.	Sex.	Locality.	Date		Measurements (mm.).					
			(1938).	L.	w.	Tl.	Tr.	C.		
26416	₫	Naksalbāri	Dec. 1	175	95	80	32	17		
26417	Unsexed	Naksalbāri	Dec. 3	181	95	89	27	18		
26418	(probably ♂) ♀	Eastern bank of R. Tista (be- tween Sivok and Bagrā- kot).	Nov. 17	183	95	89	30	16		
26419	\$	Kotj. Khāribāri	Dec. 6	171	87	82	28	17		

The specimens, while agreeing closely in plumage with the description of this race as given by Stuart Baker¹, are decidedly shorter in body length which is given by Stuart Baker as about 230 mm. as compared with 171-183 mm. in the present birds. Other measurements, however, agree with those given by that author. Possibly, Stuart Baker took the length from Yunnan and Chinese birds which are, as recognised by him, larger than the Indian birds of the same race.

This point is borne out by a large number of specimens of this race present in the Indian Museum from the following localities:—Travancore, Bangalore, Central India, Nepal, Simla Hills, and Burma including Mergui area, and also from Foochow in East China. Other races of this species, viz., musicus (from the Malay Peninsula), ceylonensis (from South Travancore,) and andamanensis (from the Andaman Islands), are also represented in the Museum, though poorly. A specimen from Sarawak (Borneo) is also present and is hardly distinguishable from the Indian race, except by its larger size.

5. Family Muscicapidae.

Genus Siphia Hodgson, 1837.

Siphia parva albicilla (Pallas), 1811-1827.

(The Eastern Red-breasted Flycatcher.)

1811-1827. Muscicapa albicilla, Pallas, Zoograph. Russo-Asiat. I, p. 462, Aves Pl. i. (Dauria).

1924. Siphia parva albicilla, Stuart Baker, Fauna Br. India, Birds (2nd ed.) II, p. 211.

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) II, p. 113 (1924).

No. 26420. Unsexed (probably 2). (Barrakhola. Nov. 23, 1938.) Measurements (mm.):—L.-103; W.-63; Tl.-45; Tr.-17; C.-8.

Stuart Baker¹ states that the female and young of S. parva albicilla are not distinguishable from those of S. parva parva. Stanford & Ticehurst² and Whistler & Kinnear³, however, point out that albicilla females and young can be distinguished from those of parva by the presence in albicilla of the colder greyer brown of the upper-parts, the truer black of the upper tail-coverts and tail and by the white underparts suffused with grey on the breast (instead of creamy white suffused with buff). A comparison of specimens of the two races available in the Indian Museum bears out these points. On these characters, our specimen would seem to be a female of albicilla. (loc. cit.) states that S. p. parva, which, like S. p. albicilla, is a winter visitor to India, extends "as far East as Bihar and Singhbhum in Since our specimen was shot outside the range of parva but within the normal range of albicilla, its reference, based on plumage characters, to the latter race is confirmed by distributional evidence. It may be added that albicilla is generally regarded as being confined to North-East India. Whistler & Kinnear (loc. cit.) have collected evidence to show that stragglers of albicilla may occur all along the base of the Himalayas, and also as far south as the Nallamalais Range (about 15°N. latitude) in South India.

The bird is represented in the Indian Museum by a small series of skins from the following areas:—Bangalore, Agra, East Bihar (Singhbhum and Manbhum), West Bengal (including Calcutta), Darjeeling, Assam and Upper Burma. The allied race S. p. parva is represented in the Museum by specimens from Bhoura (Malabar), South East Berar, the Central Provinces and Singhbhum (East Bibar) in India, and from Gulran in Afghanistan.

Genus Muscicapula Blyth, 1843.

Muscicapula sapphira Blyth, 1843.

(The Sapphire-headed Flycatcher.)

1843. Muscicapula sapphira, Blyth, Journ. Asiat. Soc. Bengal XII, p. 939 (ex Tickell's MS.).

1924. Cyornis sapphira, Stuart Baker, Fauna Br. India, Birds (2nd ed.) II, p. 225. [Corrected to Muscicapula sapphira in vol. VIII, p. 628 (1930).]

No. 26421. Unsexed (most probably \mathfrak{P}). (Barrākholā. Nov. 24, 1938.)

Measurements (mm.):—L.-102; W.-58; Tl.-44; Tr.-16; C.-7.

The bird appears to be represented in the Indian Museum by a single ill-preserved male specimen (No. 8870) from Ponsee(?) in the Kahyen Hills, Burma, collected by the British Yunnan Expedition in 1868.

p. 904 (1931).

³ Whistler, H. and Kinnear, N. B., *Journ. Bombay Nat. Hist. Soc.* XXXVI, p. 81, (1932).

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) II, p. 211 (1924).

² Stanford, J. K. and Ticehurst, C. B., Journ. Bombay Nat. Hist. Soc. XXXIV,

Genus Culicicapa Swinhoe, 1871.

Culicicapa ceylonensis ceylonensis (Swainson), 1820-1821.

(The Grey-headed Flycatcher.)

1820-1821. Platyrhynchus ceylonensis, Swainson, Zool. Illustr. I, p. 13. (Ceylon). 1924. Culicicapa ceylonensis ceylonensis, Stuart Baker, Fauna Br. India, Birds (2nd ed.) II, p. 254. [Vide correction of range of distribution in vol. VIII, p. 632 (1930), under C. c. pallidor.]

No. 26422. A. (Naksalbāri. Dec. 1, 1938.)

Measurements (mm.):—L.-116; W.-63; Tl.-58; Tr.-15; C.-8.

The bird is represented in the Indian Museum by a series of nearly 40 skins from practically all over its range, except Ceylon and Siam. Ticehurst¹ recognises the birds of the North-West Frontier Province, Kashmir, North-West Himalayas, Nepal and Sikkim as a separate race, pallidor, with Simla as the type-locality. This race is said to be paler and more brightly coloured than any of the other races. In the Indian Museum there are a number of well-preserved skins from Sikkim, Nepal, Dehra Dun, Murree and Garhwal which are not particularly pale, and skins from the Central Provinces are paler than them; again, two skins from Manbhum and Singhbhum in East Bihar are as pale-brown as the birds from the Central Provinces and paler than some of the Western Himalayan specimens. It would, therefore, seem difficult to accept Ticehurst's new race pallidor. The eastern birds (East Bengal, etc.) would, however, appear to be darker, the brown being overlaid with slaty in the entire plumage. They cannot, however, be separated into a distinct race on the material available in the Museum.

The other two races of the Grey-headed Flycatcher, viz., the "Malayan" race meridionalis and the "Chinese" race orientalis are not represented in the Indian Museum.

6. Family Laniidae.

Genus Lanius Linnaeus, 1758.

Lanius cristatus cristatus Linnaeus, 1758.

(The Brown Shrike.)

1758. Lanius cristatus, Linnaeus, Syst. Nat. (10th ed.) I, p. 93. (Bengal).
1924. Lanius cristatus cristatus, Stuart Baker, Fauna Br. India, Birds (2nd ed.) II, p. 300.

No.	Sex.	Locality.	Date	Measurements (mm.).					
110.	Dox,	notality.	(1938).	L.	w.	Tl.	Tr.	C.	
26423	(?)	Naksalbāri	Dec. 2	153	74	72	28	13	
26424	Ş	Khāribāri	Dec. 7	173	89	90	26	14	

¹ Ticehurst, C. B., Bull. Br. Ornith. Club XLVII, p. 108 (1927).

Stuart Baker's treatment of this bird, both as regards description of the plumage and distribution, is unfortunately incomplete. coloration and other characters of the two specimens recorded here agree with the account given by this author for L. c. cristatus, with this difference that the present specimens show numerous dark brown wavy or crescentic transverse bars on the whole of the under surface and flanks, except the chin, throat, anterior breast and centre of abdo-Such a condition is not mentioned by Stuart Baker. The discrepancy is explicable by the following statement of Oates2 with regard to Lanius cristatus (part) which is synonymous with L. cristatus cristatus of to-day:—"Perfect adults have no bars on either the upper or lower plumage, but such unbarred birds are comparatively rare; the majority have traces of bars on the breasts and flanks. Nestlings are profusely barred with dark brown on every portion of plumage, and the eye-band is brown. It takes two or more years (vide infra) for the bird to attain Ali & Whistler³, while recording the bird from mature plumage" Travancore and Cochin, observe that "the first winter plumage (barred on lower surface) is probably changed for the fully adult plumage (unbarred on lower surface)4 in the first spring "

The Brown Shrike is a winter visitor to India. Stuart Baker (loc. cit.) wrongly confines its Indian range to North India. It is also a common visitor to South India and Ceylon, its occurrence in the former region having been confirmed recently by Ali & Whistler (loc. cit.). Ticehurst⁵ states that these birds in adult plumage are quite common in Burma where, however, they do not breed. In the Indian Museum there is an excellent series of skins from the following localities:— Baluchistan (Mastung), Central Provinces, Madras Presidency (Shevaroy Hills), Travancore (Ponmudi), Bengal, Assam, Bhutan and Burma (South of the Irrawadi). Thus, this Shrike might be said to be found all over India (except the north-western portion) and Burma.

The other Indian races of L. cristatus, namely, isabellinus, lucionensis and phoenicuroides, are also represented in the Indian Museum.

Stuart Baker⁶ claims to have found nests of Lanius cristatus cristatus in the Cachar and the Khasia Hills in Assam; the accuracy of the claim is, however, questioned by Ticehurst (loc. cit.).

7. Family ARTAMIDAE.

Genus Artamus Vieillot, 1816.

Artamus fuscus Vieillot, 1817.

(The Ashy Swallow-Shrike.)

1817. Artamus fuscus, Vieillot, Nouv. Dict. d'Hist. Nat. XVII, p. 297. (Bengal). 1924. Artamus fuscus, Stuart Baker, Fauna Br. India, Birds (2nd ed.) II, р. 348.

Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) II, p. 300 (1924).
 Oates, E. W., Fauna Br. India, Birds (1st ed.) I, p. 469 (1889).
 Ali, S. and Whistler, H., Journ. Bombay Nat. Hist. Soc. XXXVIII, p. 307 (1935).

⁴ Parentheses by the author. ⁵ Ticehurst, C. B., Journ. Bombay Nat. Hist. Soc. XXXVIII, pp. 824, 825 (1936).
⁶ Baker, E. C. Stuart, Ibis I (7th Ser.), p. 330 (1895); Nidification Birds Indian Emp. II, pp. 270, 271 (1933).

No. 26427 d. (Naksalbāri. Dec. 5, 1938.)

Measurements (mm.):—L.-181; W.-135; Tl.-66; Tr.-18; C.-17.

The bird is represented in the Indian Museum by a series of about 30 skins from Travancore, Central Provinces, Orissa, Bengal (Calcutta and Darjeeling), Sikkim and Assam. It is not found in Western and North-Western India.

The only other Indian representative of Artamidae, viz., Artamus leucorhynchos humei, is not represented in the Indian Museum.

8. Family DICRURIDAE.

Genus Dicrurus Vieillot, 1817.

Dicrurus macrocercus albirictus Hodgson, 1837.

(The Himalayan Black Drongo.)

1837. Dicrurus albirictus, Hodgson, Indian Rev. I, p. 326. (Nepal).
1924. Dicrurus macrocercus albirictus, Stuart Baker, Fauna Br. India, Birds (2nd ed.) II, p. 357.

No. 26425. J. (Khāribāri. Dec. 6, 1938.)

Measurements (mm.):—L.-305; W.-154; Tl.-183; Tr.-27; Culmen (full)—22; Culmen from anterior edge of nostrils to tip—18; Width of culmen at nostrils—9.

Ticehurst¹ does not support the recognition of a special Himalayan race of the Black Drongo as has been done by Stuart Baker², and says: "No reliance can be placed on average measurements when sex is disregarded or is unknown, as obviously one group might contain more males or more females than the other. The maximum wing length and the minimal tail length in the two supposed races (D. m. macrocercus and D. m. albirictus) are precisely the same and I cannot find on my own measurements any difference in the bill length between the two"

I agree with Ticehurst's views. In the fairly large series of skins of the Black Drongo from all over India present in the Indian Museum no separation of the Himalayan race is possible, and any such separation would be purely arbitrary. I have assigned the bird here recorded from the Bengal Duars to albirictus merely because of geographical reasons and for the sake of uniformity with Stuart Baker's nomenclature. The small Ceylonese race minor is not represented in the Indian Museum. There are a few birds from Southern Burma, but their assignment to the various races recognised by Stuart Baker is not easy for reasons similar to those given above for his Himalayan race.

¹ Ticehurst, C. B., Journ. Bombay Nat. Hist. Soc. XXXI, p. 496 (1926).

² Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) II, p. 357 (1924).

Genus Chaptia Hodgson, 1837.

Chaptia aenea aenea (Vieillot), 1817.

(The Northern Bronzed Drongo.)

1817. Dicrurus aeneus, Vieillot, Nouv. Dict. d'Hist. Nat. IX, p. 586. (Bengal, restricted to Dacca).

1924. Chaptia aenea aenea, Stuart Baker, Fauna Br. India, Birds (2nd ed.) II,

No. 26426. Q. (Eastern bank of R. Tista, between Sivok and Bagrā-Nov. 17, 1938.)

Measurements (mm.):—L.-224; W.-123; Tl.-128; Tr.-18; C.-19.

Notwithstanding the review of the family Dicruridae by Stuart Baker¹ and his subsequent account in the Fauna², the distinction between the two subspecies of Chaptia aenea, namely, C. a. aenea and C. a. malayensis, is based on unsatisfactory characters. Difference in size is said to be the only important distinction between the two, as the colour within the limits of each subspecies varies considerably. A brief description of the colour of the present specimen is, therefore, given below:—Colour of entire plumage black. Whole of upper plumage glossed with steel blue; tufts of feathers at anterior end of crown and on forehead not glossed. Lores, sides of head below the eye, and ear coverts not glossed. Anterior breast black, glossed with steel blue. The rest of the lower plumage dark grey, becoming paler towards the Primaries and upper tail feathers not glossed, except thinly at the outer edges.

Chaptia aenea is represented in the Indian Museum by a series of some 30 skins ranging from South India, and via Eastern India to Burma, Malacca and Borneo. I am quite unable to distinguish the two races aenea and malayensis from their plumage, and the little difference in average wing-length given by Stuart Baker² does not appear to be sufficiently significant. Birds from South India (Travancore, Mangalore, Shevaroy Hills, etc.), Bengal (Darjeeling and Calcutta), Assam (Garo Hills and Sylhet), Burma (South Irrawady, Arakan and Upper Burma) and Malacca appear to be all alike. Stuart Baker³ adds Sumatra and Borneo to the range of C. a. malayensis. It would appear, however, that while birds from India, Burma and Malaya all probably belong to a single race—I cannot support their division into two races aenea and malayensis,—the Borneo birds are probably different, as is shown by a skin (No. 22635) from Kushing (Sarawak, Borneo) in the Indian Museum. In this specimen, unlike the Indian and Malayan birds, not only the breast, but also the whole of the under-part, including the throat, abdomen and under-tail coverts, are black and are glossed. Whether Sumatran birds are similar to this Borneo bird, I am unable to say. Kuroda⁴ does not record Chaptia aenea from Java.

4 Kuroda, N., Birds Is. Java I (1931).

Baker, E. C. Stuart, Novitat. Zool. XXV, pp. 291, 304 (1918).
 Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) II, pp. 368, 369 (1924).
 Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) VIII, p. 630 (1930).

9. Family ORIOLIDAE.

Genus Oriolus Linnaeus, 1766.

Oriolus xanthornus xanthornus (Linnaeus), 1758.

(The Indian Black-headed Oriole.)

1758. Coracias xanthornus, Linnaeus, Syst. Nat. (10th ed.) I, p. 108. (Bengal). 1926. Oriolus xanthornus xanthornus, Stuart Baker, Fauna Br. India, Birds (2nd ed.) III, p. 11.

No. 26428. A. (Khāribāri. Dec. 6, 1938.)

Measurements (mm.): L.-220; W.-146; Tl.-100; Tr.-35; C.-30.

Stuart Baker's description of the plumage of this common bird is unsatisfactory, as pointed out by Stanford & Ticehurst² who state that Stuart Baker's description of the adult female applies in reality to the first winter bird. These authors, as also Whistler & Kinnear³, further point out that the adult female is like the adult male, except that the upper and under parts are somewhat duller and there is a black bar across both webs of the rectrices extending to the outermost or penultimate. There is a large number of birds in the Indian Museum collections labelled as "females" (presumably adult), but which should, according to the above contention of Stanford & Ticehurst, be regarded not as adults but as first winter birds. There appear to be no other "adult" females in the Indian Museum, so that it is not possible to test the accuracy of the above mentioned claims of Stanford & Ticehurst and of Whistler & Kinnear.

In the Indian Museum are also present a few birds from Ceylon and Travancore, and two from the Andaman Islands. Although Stuart Baker⁴ distinguishes a distinct Ceylonese race, I am unable to separate the "Ceylon" birds from the "Indian" Similarly, the Andaman birds are inseparable from the rest, except perhaps by their smaller size.

10. Family STURNIDAE.

Genus Acridotheres Vieillot, 1816.

Acridotheres tristis tristis (Linnaeus), 1766.

(The Common Myna.)

1766. Paradisea tristis, Linnaeus, Syst. Nat. (12th ed.) I, p. 167. (Philippines, by mistake?; Calcutta).
1926. Acridotheres tristis tristis, Stuart Baker, Fauna Br. India, Birds (2nd

ed.) III, p. 53.

No. 26429. S. (Sivok Ghāt. Nov. 25, 1938.)

Measurements (mm.): L.-228; W.-138; Tl.-85; Tr.-41; C.-21.

This bird is very wide-spread, being found throughout Afghanistan, India, Burma and part of Siam. It is poorly represented in the Indian

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) III, p. 11 (1926). ² Stanford, J. K. and Ticehurst, C. B., Ibis II (14th Ser.), p. 600 (1938).

³ Whistler, H. & Kinnear, N. B., Journ. Bombay Nat. Hist. Soc. XXXVI, p. 585 (1933).

⁴ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) III, p. 12 (1926).

Museum, where skins from the following localities are present:—Chitral, Kashmir, Kumaun Hills, Nepal, Bengal, Orissa, Baroda in Central India, Jodhpur in Rajputana, Travancore and Upper Burma. There is an albino specimen (No. 25453) from Tocklai (Assam) in which the black and brown pigments have been largely suppressed and the plumage is white, lightly speckled with dark brown.

The Ceylonese race A. t. melanosternus is not represented in the

Indian Museum.

11. Family PLOCEIDAE.

Subfamily PLOCEINAE.

Genus Ploceus Cuvier, 1817.

Ploceus philippinus (Linnaeus), 1766.

1766. Loxia philippina, Linnaeus, Syst. Nat. (12th ed.) I, p. 305. (Ceylon [Hartert]).

1926. Ploceus philippinus, Stuart Baker, Fauna Br. India, Birds (2nd ed.) III, p. 67.

No. 26430. Q. (Naksalbāri. Dec. 1, 1938.)

Measurements (mm.):—L.-138; W.-70; Tl.-56; Tr.-22; C.-16.

The bird is represented in the Indian Museum by a small series of skins from Agra, Lucknow, Singhbhum, Calcutta, South Berar, and South Mangalore, and a few also from Nepal. Although the bird is found throughout India, other Indian localities are not represented in the Museum. Skins of the allied species, such as megarhynchus, benghalensis and atrigula, are also available, but the collection of Bayas and Weaver-birds in the Indian Museum is, on the whole, poor.

12. Family Fringillidae.

Subfamily FRINGILLINAE.

Genus Passer Brisson, 1760.

Passer domesticus indicus Jardine & Selby, 1831.

(The Indian House-Sparrow.)

1831. Passer indicus, Jardine & Selby, Illustr. Indian Ornith. III, p. 118. (Continental India. Now restricted to Karachi in Sind.)
1926. Passer domesticus indicus, Stuart Baker, Fauna Br. India, Birds (2nd ed.) III, p. 170.

No. 26431. J. (Siliguri. Nov. 15, 1938.)

Measurements (mm.):—L.-130; W.-73; Tl.-60; Tr.-19; C.-11.

The bird is poorly represented in the Indian Museum, considering that the House-Sparrow is among the most familiar birds in India. A few representatives of the other two Indian races, viz., the Burmese race nigricollis and the Kashmir race parkini, which are also present, can be distinguished from indicus by the chocolate on the head, neck and mantle being deeper and more extensive. A female Passer

domesticus (No. 9773) from Bushire (South Iran) is also present, it is much paler than the Indian birds, and I am not certain whether it can be placed under P. d. indicus even though this race is said to extend to Western Iran, Southern Arabia, Iraq and Transcaspia.

13. Family MOTACILLIDAE.

Genus Motacilla Linnaeus, 1758.

The difficulty of identifying the various subspecies of Indian Wagtails has been commented upon by most workers, notably by Ticehurst¹ and by Stuart Baker².

Motacilla alba baicalensis Swinhoe, 1871.

(Swinhoe's White Wagtail.)

1871. Motacilla baicalensis, Swinhoe, Proc. Zool. Soc. Lond., p. 363. (? Eastern 1926. Motacilla alba baicalensis, Stuart Baker, Fauna Br. India, Birds (2nd ed.) III, p. 260.

No.	Sex.	Locality.	Date (1938).	Measurements (mm.).					
				L.	w.	Tl.	Tr.	C.	
26432	Q.	Eastern bank of R. Tista (between Sivok and Bagrākot).	Nov. 17	169	89	88	24	14	
26433	Ş	Barrākholā	Nov. 24	173	90	91	24	13	

The birds here recorded agree with Stuart Baker's description of M. a. baicalensis, and are distinguishable from the closely allied race M. a. personata by their white chin in contrast to the black of personata. In bird No. 26432 the white chin is mottled with black so that this specimen appears to be an intermediate (a hybrid?) between personata and baicalensis. A few such intermediates are also present in the collections of the Indian Museum.

M. a. baicalensis breeds in Eastern Siberia from Lake Baikal to East Manchuko (Manchuria), and winters in South China, Yunnan, Burma and India. The most western Indian range is given by Stuart Baker (loc: cit.) as North Cachar in Assam. In the Indian Museum there are a number of well-preserved skins of baicalensis from as far west as Kashgar, Gilgit and Ladak, and also from Simla and Sikkim. The range of this bird must, therefore, be extended west up to Kashgar in Eastern Turkestan.

On the other hand, M. a. personata breeds from Turkestan to South-West of Lake Baikal, Afghanistan, and perhaps also in Kashmir and the North-West Frontier of India. It visits "Gilgit, Kashmir, Ladak

Ticehurst, C. B., Journ. Bombay Nat. Hist. Soc. XXVIII, pp. 1082-1090 (1922).
 Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) III, pp. 260-275 (1926).
 Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) III, p. 260 (1926).

and the extreme North-West Frontier of India" For the following reasons, this range needs drastic extension eastwards so as to cover practically the whole of the North Indian Plains and reach up Burma:—(i) Stevens¹ records this race (personata) from the northeastern portion of Upper Assam, referring to two specimens, one caught in September 1904, and adding: "the only records" This record was overlooked by Stuart Baker². (ii) Wickham³ records both personata and baicalensis from the Shan States in Burma. (iii) A second Burmese record of personata is that of Stanford & Ticehurst⁴ from Manpwa on the Irrawady in February, the year of record not being given. (iv) From the above records one would expect that personata should also be found in the zone lying between the North-Western Frontier and Burma. This expectation is partially fulfilled by an examination of the collections in the Indian Museum in which there is a skin of personata from the Punjab, a second from Agra in the United Provinces, and a third from Nagpur in the Central Provinces. It may confidently be predicted that personata will be found throughout the North Indian Plains.

On the basis of the above remarks, the distribution of the two races may be summarised as follows:—

Motacilla alba baicalensis.—Breeding in East Siberia, from Lake Baikal to East Manchuko (Manchuria). Wintering in South China and via Yunnan, Burma, Assam, Sikkim and Simla to Gilgit, Ladak and Kashgar, apparently being confined to the hilly tracts and not spreading south to the Indian Plains whence no records have so far been obtained.

Motacilla alba personata.—Breeding from Turkestan to South-West of Lake Baikal, in Afghanistan, and perhaps also in Kashmir and in the ranges of the North-West Frontier of India. Wintering in India, entering via Kashgar, Ladak, Kashmir, North-West Frontier Province, the Punjab and the United Provinces, and spreading east to Assam and Burma; its southern limit in India is Nagpur in the Central Pro-

We thus have an interesting example of two races of a species breeding in different but adjoining areas in the North and wintering in a more or less common country in the South. Motacilla alba baicalensis breeds in Siberia, East of Lake Baikal, and migrates south in winter, entering India by the North-Eastern Passage and reaching up to and even a little beyond the North-Western portion of the country. M. a. personata, on the other hand, breeds in Central Asia, South-West of Lake Baikal up to the North-Western Frontier of India, and is a winter migrant into India, entering it by the North-Western Passage, spreading itself throughout the North-Indian Plains and reaching east up to As stated above, it would appear from available records that the winter distribution of the two races in India is probably mutually exclusive, at any rate partly. Thus, baicalensis confines itself to the cooler foot-hills of the Himalayas, not spreading south to the warmer plains; personata, on the other hand, is found not only in the cooler

¹ Stevens, H., Journ. Bombay Nat. Hist. Soc. XXIII, p. 266 (1914).

Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) III, pp. 259, 260 (1926).
 Wickham, P. F., Journ. Bombay Nat. Hist. Soc. XXXIV, p. 50 (1930).
 Stanford, J. K. and Ticehurst, C. B., Ibis V (13th Ser.), pp. 267, 268 (1935).

regions of Kashmir, Gilgit, etc., but also spreads to the warmer plains further south.

Collections of these Wagtails, both in the North Indian Plains and in Assam and Burma, are greatly to be desired for a fuller determination of their winter distribution.

Motacilla maderaspatensis Gmelin, 1789.

(The Large Pied Wagtail.)

1789. Motacilla maderaspatensis, Gmelin, Syst. Nat. I, p. 961. (India).

1926. Motacilla lugubris maderaspatensis, Stuart Baker, Fauna Br. India, Birds (2nd ed.) III, p. 263. [In vol. VIII, p. 659 (1930), Stuart Baker remarks that owing to the uncertainty of the status of M. l. maderaspatensis and allied subspecies, they should for the present be raised to specific rank. Accordingly, M. lugubris maderaspatensis becomes M. maderaspatensis.]

No. 26434. J. (Mongpong. Nov. 18, 1938.)

Measurements (mm.): L.-195; W 97; Tl.-105; Tr.-27; C.-15.

The present specimen differs from Stuart Baker's description of the species in two points: (i) It is much shorter in body length which is only 195 mm. as compared with 240 mm. given by Stuart Baker. Specimens in the Indian Museum from practically the whole of the Indian range of the species measure 185 to 220 mm. in length. (ii) Its outer tail feathers are white edged with black on the inner web, instead of being black edged with white as described by Stuart Baker. The specimens in the Indian Museum conform to the present, rather than to Stuart Baker's, description.

Regarding its range, Stuart Baker includes West Bengal but categorically excludes East Bengal. The present find from North-East Bengal would, therefore, extend the range of the species to Eastern Bengal.

(B) Order CORACIIFORMES.

(a) Suborder PICI.

14. Family PICIDAE.

Subfamily PICINAE.

Genus Dryobates Boie, 1826.

Dryobates macei (Vieillot), 1818.

(The Fulvous-breasted Pied Woodpecker.)

Picus macei, Vieillot, Nouv. Dict. d'Hist. Nat. XXVI, p. 80. (Bengal).
 Dryobates macei, Stuart Baker, Fauna Br. India, Birds (2nd ed.) IV, p. 39.

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) III, p. 263 (1926).

No.	Sex. Locality.	Looslity	Date (1938).	Measurements (mm.).					
		nocanoy.		L.	W.	T1.	Tr.	C.	
26435	ð	Naksalbāri	Dec. 3	180	107	70	20	24	
26436	Ŷ.	Naksalbāri	Dec. 3	170	100	72	20	20	

The status of this species is uncertain, and Stanford & Ticehurst¹ regard it as a subspecies of *D. atratus*.

Stuart Baker² gives the most eastern range of *D. macei* as Akyab in South-Western Burma. He, however, overlooked the work of Oates³ who recorded it (*Picus macii*) from Bhamo in Northern Burma. Very recently, Stanford & Ticehurst (*loc. cit.*) have recorded it from several parts of Burma, *viz.*, from the Hukwang, Irrawady and Namyin Valleys, from Hakmati Long Plain and from the lower hills near Tingpai. It is well known that *D. atratus* occurs practically throughout Burma. On rather slender evidence, Standford & Ticehurst (*loc. cit.*) conclude that the distributions of *macei* and *atratus* in Burma are mutually exclusive. There can be no question that our knowledge of their distribution in Assam and Burma is in a state of confusion and I agree with Stanford & Ticehurst in their remark that the distribution of both the species needs more attention in these areas.

The western limit of macei given by Stuart Baker⁴ as Murree also does not appear to be correct, for Ticehurst⁵ observes: "This species certainly does not extend as far west as Murree (specimens, Whistler Coll.) but the western race is easily separable by the longer bill and wing from the Bengal race. 33. W.(ing) 114-118. B.(ill) 26-30. The western form is Dryobates macei westermani Blyth. (Ibis 1870, p. 163). Type in Amsterdam Museum" Stuart Baker⁶, however, says that on the material available he is unable to distinguish westermani from the typical form.

There is a small collection of these birds in the Indian Museum from the following localities:—Nepal; Nadia and Darjeeling Districts and Calcutta in Bengal; Dafla Hills (South Bhutan and North Assam); Garo Hills (Western Assam); and Rotung (1,400 ft.) and Kobo (400 ft.) towards North-Eastern Assam. The birds from the last two places were collected by the British Abors (North-Eastern Assam) Expedition.

¹ Stanford, J. K. and Ticehurst, C. B., Ibis III (14th Ser.), pp. 4, 5 (1939).

² Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) IV, p. 40 (1927).

³ Oates, E. W., *Ibis* VI (5th Ser.), p. 72 (1888).

⁴ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) IV, p. 40 (1927).

⁵ Ticehurst, C. B., Journ. Bombay Nat. Hist. Soc. XXXIV, pp. 468, 469 (1930).

⁶ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) VIII, p. 671 (1931).

15. Family Capitonidae.

Genus Thereiceryx Blanford, 1893.

Thereicervy lineatus hodgsoni (Bonaparte), 1850.

(The Assam Lineated Barbet.)

1850. Megalaema hodgsoni, Bonaparte, Cospect. Gener. Avium I, p. 144. (Bengal).

1927. Thereiceryx lineatus hodgsoni, Stuart Baker, Fauna Br. India, Birds (2nd ed.) IV, p. 111.

No. 26437. Q. (Gish. Nov. 21, 1938.)

Measurements (mm.): L.-240; W.-131; Tl.-95; Tr.-35; C.-34.

Stuart Baker¹ separates the Assam race hodgsoni from the Burmese race intermedius merely on the ground of slight difference in average wing length. Ticehurst² objects to this and points out that the Burmese race is unrecognisable. An examination of the excellent series of skins in the Indian Museum from the South Irrawady (Burma) seems to support Ticehurst's conclusion.

Genus Cyanops Bonaparte, 1854.

Cyanops asiatica asiatica (Latham), 1790.

(The Blue-throated Barbet.)

1790. Trogon asiaticus, Latham, Index Ornith. I, p. 201. (India. Now restricted to Calcutta.)

1927. Cyanops asiatica asiatica, Stuart Baker, Fauna Br. India, Birds (2nd ed.) IV, p. 116.

No.	Sex.	Locality.	Date (1938).	Measurements (mm.).					
		посаноў.		L.	w.	Tı.	Tr.	C.	
26438	2	Naksalbāri	Dec. 3	205	100	68	30	25	
26439	Ş.	Naksalbāri	Dec. 6	200	101	71	28	22	

It is clearly recognised by Blanford³, by Stuart Baker⁴ and by Whistler⁵ that one of the distinctions between the present bird and the closely allied subspecies C. a. davisoni is that whereas in asiatica the band across the vertex is black, in davisoni it is blue. In a later work, however, Stuart Baker⁶ gives the correction that for asiatica the "black" band across the vertex should read "blue" rection appears to be doubtful. It may be added that Stuart Baker's

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) IV, p. 111 (1927).
2 Ticehurst, C. B., Journ. Bombay Nat. Hist. Soc. XXXIV, p. 470 (1930).
3 Blanford, W. T., Fauna Br. India, Birds (1st ed.) III, pp. 92-94 (1895).
4 Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) IV, p. 116 (1927).
5 Whistler, H., Pop. Handb. Indian Birds, p. 224 (1928).
6 Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) VIII, p. 675 (1930).

⁶ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) VIII, p. 675 (1930).

(1927, op. cit., vol. IV, p. 118) description of C. a. davisoni as having the band across the vertex "black instead of blue" also appears to be incorrect, and should be "blue instead of black" In short, the band across the vertex is black in the subspecies asiatica and blue in davisoni. The large series of skins of C. a. asiatica and a smaller one of C. a. davisoni present in the Indian Museum confirm this point.

Genus Xantholaema Bonaparte, 1854.

Xantholaema haemacephala indica (Latham), 1790.

(The Burmese Crimson-breasted Barbet.)

1790. Bucco indicus, Latham, Index Ornith. I, p. 205. (Calcutta).
1927. Xantholaema haemacephala indica, Stuart Baker, Fauna Br. India, Birds (2nd ed.) IV, p. 127.

No. 26440. J. (Khāribāri. Dec. 5, 1938.)

Measurements (mm.):—L.-144; W.-84; Tl.-40; Tr.-25; C.-17.

Stuart Baker¹ distinguishes two races of Xantholaema haemacephala in India, viz., the "Burmese" race X. h. indica and the "Indian" race X. h. lutea. Whistler & Kinnear², however, point out that this distinction is untenable as specimens from India, Ceylon and Burma cannot be distinguished from one another, and all belong to a single race.

An examination of the excellent series of skins from all over India (excluding the North-Western and Western portions, i.e., the Punjab, Sind, Gujrat, etc.), Ceylon, Burma, and the Malay Peninsula present in the Indian Museum, confirms Whistler's contention, and I am unable to distinguish the two races of Stuart Baker. There is an albino specimen (No. 5031) collected in 1869 from the Midnapur jungles, Bengal. In this bird the entire plumage is white, with the exception of the seventh to tenth primaries and four of the following secondaries which are dusky, narrowly edged on the outer webs with grey-green; the areas of the fore-crown and fore-breast, which are bright crimson in the normal bird, are light golden in the albino specimen; the bill and legs are also devoid of black pigment and are pale horny brown.

(b) Suborder CORACII.

16. Family Coraciidae.

Genus Coracias Linnaeus, 1758.

Coracias benghalensis benghalensis Linnaeus, 1758.

(The Indian Roller or Blue Jay.)

1758. Coracias benghalensis, Linnaeus, Syst. Nat. (10th ed.) I, p. 106. (Bengal) 1927. Coracias benghalensis benghalensis, Stuart Baker, Fauna Br. India, Birds (2nd ed.) IV, p. 224.

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) IV, pp. 126-129 (1927).

² Whistler, H. and Kinnear, N. B. Journ. Bombay Nat. Hist. Soc. XXXVII, pp. 516, 517 (1934).

No.	Sex.	Locality.	Date (1938).	Measurements (mm.).					
		Locanty.		L.	W.	Tl.	Tr.	C.	
26441	(?)	Siliguri	Nov. 26	305	150	128	27	30	
26442	ð	Naksalbāri	Dec. 3	325	185	140	33	33	

This bird is poorly represented in the collections of the Indian Museum; there are only about two dozen specimens from the following localities:—Chanda in the Central Provinces; Ahmadabad in Gujrat; Purnea and Singhbhum in Bihar; and Nadia District and Calcutta in Bengal. In many of these specimens, viz., from Chanda, Ahmadabad, Calcutta and Singhbhum, the nuchal collar is reddish purple and is well-marked. There is also a specimen from Khist (Southern Iran) which seems to belong to this race. Specimens from Rajputana, Sind and the Punjab are wanting.

The Southern Indian race C. b. indica is represented in the Indian Museum by a few skins from Travancore, while of the "Burmese" race C. b. affinis there is a single specimen from the Amingaon District in Assam.

(c) Suborder STRIGES.

17. Family Asionidae.

Subfamily BUBONINAE.

Genus Athene Boie, 1822.

Athene brama indica (Franklin), 1831.

(The Northern Spotted Owl.)

1831. Noctua indica, Franklin, Proc. Zool. Soc. Lond., p. 115. (United Provinces).
1927. Athene brama indica, Stuart Baker, Fauna Br. India, Birds (2nd ed.) IV, p. 440.

No. 26443. S. (Siliguri. Nov. 26, 1938.)

Measurements (mm.):—L.-213; W.-170; Tl.-95; Tr.-37; C.-19.

The bird here recorded would, because of its larger size, appear to belong to the race indica rather than to the Burmese race pulchra, although the colour is slaty-brown and much darker than is usual for indica. In the Indian Museum collections there are several specimens from Upper Burma which by their small size may be said to belong to pulchra; in coloration, however, while many are dark like true pulchra, one specimen is paler like the true indica. It would, therefore, seem that forms intermediate between pulchra and indica are found from North-East Bengal to Upper Burma, although indica predominates east up to Assam, while pulchra predominates in Upper Bengal to Upper Burma and ultimately completely replaces indica in

Central and South Burma and extends further east up to Yunnan and Cambodia.

A. b. indica is represented in the Indian Museum by a fine series of skins from Bihar, Bengal, Assam (Cachar and Gauhaty), the Agra District and Ahmadabad; there is a specimen from Bampur (Baluchistan) which seems to belong to this race, and another from Upper Burma. Stuart Baker gives the western limit of the race as Sind. In view of the above specimen from Baluchistan, the range should be extended further west to include that area. There is an albino bird from Benares in which the entire plumage is pure white.

The Burmese race A. b. pulchra is represented in the Indian Museum by a few specimens from Upper and Western Burma, the Southern Irrawady and Mandalay. Of the South Indian race, A. b. brama, there are only four specimens from the East Mangalore District, the Shevaroy

Hills, the Bangalore District and Trivandrum.

(C) Order ACCIPITRES.

18. Family FALCONIDAE. Subfamily FALCONINAE. Genus Cerchneis Boie, 1826.

Cerchneis tinnunculus tinnunculus (Linnaeus), 1758.

(The European or Common Kestrel.)

1758. Falco tinnunculus, Linnaeus, Syst. Nat. (10th ed.) I, p. 90. (Sweden). 1928. Cerchneis tinnunculus tinnunculus, Stuart Baker, Fauna Br. India, Birds (2nd ed.) V, p. 61.

1936. Cerchneis tinnunculus tinnunculus, Swann, Monogr. Birds of Prey, Pt. XIV, p. 433.

No. 26444. Q. (Khāribāri. Dec. 7, 1938.)

Measurements (mm.):—L.-315; W.-238; Tl.-165; Tr.-45; C.-18; Mid-toe without claw—27.

This Kestrel is a winter visitor to India from Europe. Although common up to the United Provinces, it is less common further east. Stuart Baker² observes that the bird extends "East to Yunnan and Burma, though a great number of species attributed to this form from the latter place are really interstinctus or japonicus" More recently Swann³ remarks that the eastern limit of this race remains to be worked The bird here recorded is very pale rufous in colour and, for this reason, I regard it as belonging to the subspecies tinnunculus rather than to either interstinctus or japonicus. It must, however, be pointed out that the division of this species into various races is most unsatisfactory. An examination of the large series of skins of this species in the Indian Museum from Europe, Iran, Central Asia, the whole of India

Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) IV, p. 440 (1927).
 Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) V, p. 62 (1928).
 Swann, H. Kirke, Monogr. Birds of Prey, Pt. XIV, p. 436 (1936).

and Burma, and finally, one skin from Foochow in East China shows that it is often quite impossible to separate, on the basis of coloration, the several races recognised by Stuart Baker and to depend merely on geographical distribution for the purpose would admittedly be undesirable. A thorough revision of the species is greatly needed.

(D) Order COLUMBAE.

19. Family COLUMBIDAE.

Subfamily Columbinae.

Genus Streptopelia Bonaparte, 1854.

Steptopelia chinensis suratensis (Gmelin), 1789.

(The Indian Spotted Dove.)

1789. Columba suratensis, Gmelin, Syst. Nat. I, p. 778. (Surat).

1928. Streptopelia chinensis suratensis, Stuart Baker, Fauna Br. India, Birds (2nd ed.) V, p. 242.

No. 26445. Unsexed. (Gish. Nov. 22, 1938.)

Measurements (mm.):—L.-262; W.-137; Tl.-142; Tr.-25; C.-16.

The bird here recorded appears to be intermediate between the races suratensis and tigrina. Such intermediates are common in Cachar and Manipur, but their occurrence as far west as the Jalpaiguri District (North Bengal) is noteworthy. In the Indian Museum there are several skins from Darjeeling and Sylhet which also are intermediate between suratensis and tigrina. Stuart Baker¹ gives the distribution of S. c. suratensis as the whole of India, and adds that it occurs in Sind in the wet season. Ticehurst², however, points out that he searched in vain for any record of this bird from Sind; it does not appear to occur in Sind or in South-West Punjab.

The race suratensis is well represented in the Indian Museum collections from the following localities:—Travancore and the rest of South India; Berar; Mt. Abu (Rajputana); Ahmadabad; Chota Nagpur; Singhbhum in Bihar; Calcutta, Nadia, Midnapur and Darjeeling in Bengal; Nepal; and finally, Kashmir and Gilgit. The race tigrina is equally well represented from Assam, Burma (including Mergui and Tenasserim), Malacca, and the Malay Peninsula. There is a bird (No. 9080) from Momien (Yunnan, West China) which I am unable to distinguish from tigrina. Rothschild³, however, recognises and separates as race forresti the Yunnan birds, with the type-locality Tengueh (Yunnan), and this is accepted by Stuart Baker⁴. The fourth race ceylonensis is not represented in the Indian Museum.

¹ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) V, p. 242 (1928).

² Ticehurst, C. B., Journ. Bombay Nat. Hist. Soc. XXXIV, p. 479 (1930).

³ Rothschild, Lord, Novitat. Zool. XXXII, p. 293 (1926).

⁴ Baker, E. C. Stuart, Fauna Br. India, Birds (2nd ed.) V, p. 244 (1928).

(E) Order CHARADRIIFORMES.

Suborder LIMICOLAE.

20. Family CHARADRIIDAE. Subfamily VANELLINAE.

Genus Hoplopterus Bonaparte, 1831.

Hoplopterus duvaucelli (Lesson), 1826.

(The Spur-winged Plover.).

1826. Charadrius duvaucelli, Lesson, Dict. Sci. Nat. XLII, p. 36. (Calcutta). 1929. Hoplopterus ventralis, Stuart Baker, Fauna Br. India, Birds (2nd ed.) VI, p. 184. [Corrected to H. duvaucelli in vol. VIII, p. 696 (1930).]

No. 26446. S. (Mongpong. Nov. 18, 1938.)

Measurements (mm.):—L.-277; W.-198; Tl.-103; Tr.-66; C.-29.

The wing-spur in the specimen recorded here is well developed on the right wing, but is reduced to a nodule on the left one.

This species is very poorly represented in the Indian Museum, and there are only nine specimens from North Chanda (Central Provinces), Darjeeling Terai, and Upper and Lower Burma.