hours' run from Madeira) another passed the ship flying strongly and heading due south, and a third at 6 P.M. when in sight of Porto Santo. On the 22nd (off Sierra Leone) three more passed, flying south.

Sterna sandvicensis. SANDWICH TERN. I noticed a Sandwich Tern fishing in Table Bay on several days during the end of January.

[Sturnus vulgaris. STARLING. This bird, introduced at Rhondebosch near Cape Town by Mr. Cecil Rhodes in the year 1898, I found to be fairly common in Cape Town. All the birds I saw in January appeared to be in winter-plumage.]

I am indebted to Mr. H. F. Witherby for his help in determining the condition of plumage in the few birds which I shot.

XXXII.—A List of the Birds of the Anglo-Egyptian Sudan, based on the Collections of Mr. A. L. Butler, Mr. A. Chapman and Capt. H. Lynes, R.N., and Major Cuthbert Christy, R.A.M.C. (T.F.). Part II \*. Alaudidæ—Hirundinidæ. By W. L. Sclater, M.B.O.U., and C. Mackworth-Praed, M.B.O.U.

# (Plate X.+)

### Introduction.

The second portion of the List of the Birds of the Sudan completes the Passeres.

It contains descriptions of the following new subspecific forms:—

Cinnyris osea butleri, Rhodophoneus cruentus kordofanicus, Tschagra senegala sudanensis, Cisticola erythrops roseires, C. e. zwaiensis, Parisoma blanfordi somaliensis,

<sup>\*</sup> For Part I. and map, see pp. 416-476.

<sup>†</sup> For full Explanation of the Plate, see p. 721.

Sylvietta rufescens transvaalensis, Eremomela flaviventris alexanderi, Elminia longicauda loandæ, and Hirundo puella unitatis.

We have to thank Mr. Butler for much information and for allowing us to consult a valuable manuscript list of Sudanese birds compiled by himself which has proved most useful. Mr. Butler's notes have "A. L. B." appended to them.

# Family ALAUDIDÆ.

### Alæmon alaudipes alaudipes.

Certhilauda alaudipes (Desf.); Shelley, B. A. iii. p. 19.
Alæmon alaudipes (Desf.); Butler, Ibis, 1905, p. 307, 1908, p. 214.

[B. coll.] 1 Shendi Mch., 2 Bir Nurayet Nov. Ber.; 6 Omdurman Apl.-Nov., 3 Khartoum Dec. Kh.

[C. & L. coll.] 6 Omdurman Mch. Kh.

### Alæmon alaudipes desertorum.

Alauda desertorum Stanley, in Salt's Exped. Abyss. 1814, App. p. 60: Abyssinia.

[C. & L. coll.] 2 Port Sudan Apl., 1 nr. Sinkat Apl. R.S.

This bird takes the place of the last along the shores and on the islands of the Red Sea.

# Melanocorypha bimaculata.

Alauda bimaculata Ménétriés, Cat. Rais. Cauc. 1832, p. 37: mountains near Talysch, Persia.

Melanocorypha bimaculata (Mén.); Shelley, B. A. iii. p. 121.

[B. coll.] 1 Bir Nigeim Nov. Ber.; 1 Port Sudan Mch. R.S.; 15 Khartoum Jan. Mch. Oct., 1 Omdurman Feb., Kh.

# Calandrella brachydactyla brachydactyla.

Alauda brachydactyla Leisler, Wetterau. Gesellsch. Ann. ii. 1814, p. 357: S. France.

Calandrella brachydactyla (Leisl.); Shelley, B. A. iii. p. 129; Butler, Ibis, 1905, p. 308, 1908, p. 214.

- [B. coll.] 3 Jebel Tumblahit, 1 Wadi Mogileb Nov. Ber.; 14 Khartoum Jan. Feb. Oct. Nov. Dec.
- [C. & L. coll.] 2 Sinkat Mch. R.S.; 1 near Sennar Jan. Sen.; 2 Omdurman Mch. Kh.; 3 White Nile, Lat. 14° & 15° N. Jan., 1 Taufikia Jan., 1 Renk Mch. U.N.

The more eastern form, C. b. longipennis, has occurred in Egypt on migration (Nicoll, Ibis, 1912, p. 426), and very possibly occurs in the Sudan as well, though not yet recorded.

#### Calandrella minor minor.

Calandritis minor Cabanis, Mus. Hein. i. 1851, p. 123: N.E. Africa.

Calandrella minor minor (Cab.); Hartert, V. p. F. p. 218. Heuglin (Orn. N.O.-Afr. p. 697) gives Nubia in spring and autumn on migration, for this species, but there is no later record.

There are no Sudanese examples in the Museum.

### Mirafra fischeri.

Mirafra fischeri (Reichw.); Shelley, B. A. iii. p. 43; Butler, Ibis, 1908, p. 215.

[B. coll.] 1 Makwak Jan. B.G.; 2 nr. Rejaf Apl., 1 Kajo Kaji Mch. L.E.

It is difficult to arrive at any satisfactory conclusions in regard to this species. There are probably several races, though the Lado birds agree very well with an example in the Museum from Mombasa, close to the type-locality Rabai. We are strongly of opinion that there are two seasonal phases of this form—a reddish phase and a darker blackish phase. The birds here catalogued, collected Jan.—Apl., belong to the blackish phase, whereas an example obtained by Emin Pasha at Wadelai in August is in the rufous dress.

Mirafra zombæ of Frant is founded on a Nyasaland bird in the blackish phase, and will probably be found to have a

reddish dress at other times of the year, similar to that of M. fischeri if not identical with it.

### Mirafra sobatensis.

Mirafra sobatensis Lynes, Bull. B.O. C. xxxiii. 1914, p. 129.

[C. & L. coll.] 1 White Nile, Lat. 10° N. Jan. (type of the species); 2 Malakal Jan., 1 Jebel Zeraf Feb., 2 mouth of Sobat R. Feb. U.N.

This very distinct species was discovered by the Chapman-Lynes Expedition on the plains near the junction of the Sobat River with the White Nile.

#### Mirafra cheniana chadensis.

Mirafra chadensis Boyd Alexander, Bull. B. O. C. xxi. 1908, p. 89: L. Chad.

Mirafra cantillans apud Butler, Ibis, 1905, p. 308.

[B. coll.] 1 Khartoum Apl. Kh.; 3 Gedaref May, Kas.

These birds are undoubtedly identical with a series of Larks collected by Alexander in northern Nigeria and near Lake Chad.

The subspecies is very close to the Indian M. c. cantillans, but is rather paler. Following Zedlitz (J. f. O. 1916, p. 59), we believe that both these, as well as several of the African races, must be placed as subspecies of the South African M. cheniana, the oldest name in the group.

#### Mirafra albicauda.

Mirafra albicauda Reichw. J. f. O. 1891, p. 223: Gonda (=Igonda) near Tabora, German East Africa; Butler, Ibis, 1905, p. 309.

[B. coll.] 2 Gedaref Apl. May, Kas. [C. & L. coll.] 1 Sobat R. Jan. U.N.

In the J. f. O. 1916, p. 59, Count Zedlitz gives a list of the races of M. cheniana and includes M. albicauda among them. This, however, we cannot accept, as we have specimens of M. albicauda in the Museum from throughout the range of M. c. chadensis. Butler mentions that he found them often in company with M. c. chadensis, and that they were in breeding condition. Is it possible that M. albicauda

is a dimorphism of the northern races of M. cheniana, although it is often slightly larger than the lighter-coloured form? On the material before us, however, we cannot do otherwise than regard M. albicauda as a distinct species.

### Mirafra cordofanica.

Mirafra cordofanica Strickland, P. Z. S. 1850, p. 218, pl. 23: Kordofan; Butler, Ibis, 1905, p. 308.

[B. coll.] 2 Um Bosha May, Kor.

A rare species, as noticed by Shelley.

# Pinarocorys erythropygia.

Pinarocorys erythropygia (Strickl.); Shelley, B. A. iii. p. 74; Butler, Ibis, 1907, p. 467, 1908, p. 215, 1909, p. 76.

[B. coll.] 1 Malakal May, U.N.; 5 Pongo river Feb., 1 Wau Apl. B.G.; 2 nr. Rejaf Apl. L.E.

The type was from Kordofan. The birds from Bahr el Ghazal are distinctly darker than those in the Museum from the Gold Coast hinterland and northern Nigeria, as well as from a single old specimen said to be from Kordofan. If they turn out to be sufficiently distinct, they can be called *P. e. infuscata* (Heuglin, J. f. O. 1864, p. 273).

# Heliocorys modesta modesta.

Heliocorys modesta (Heugl.); Shelley, B. A. iii. p. 113; Butler, Ibis, 1908, p. 214, 1909, p. 76.

[B. coll.] 2 Wau Jan. Apl., 2 Katta Jan., 1 Kuanga Feb., 1 Chak Chak Feb., 2 west of Tonj Jan. B.G.; 3 Bor, Mon.; 2 Kajo Kaji Mch. Apl. L.E. [Chr. coll.] 4 Wau July-Aug. B.G.

### Galerida cristata eritreæ.

Galerida cristata eritreæ Zedlitz, O. M. xviii. 1910, p. 59: Ghedem, Red Sea Coast.

Galerida cristata (Linn.); Butler, Ibis, 1909, p. 393.

[B. coll.] 5 Port Sudan Apl. May, R.S.

[C. & L. coll.] 5 Port Sudan Dec., 1 Erkowit Apl. R.S.

These birds have been kindly identified for us by Dr. Hartert.

We should suggest, however, that the race indicated by Hartert (Vög. pal. Fauna, i. p. 234) as Galerida cristata subsp.? from the Abyssinian coast-lands, and subsequently named G. c. nubica by Bianchi (Bull. Acad. Sci. Petersburg, xxv. 1905, p. 69), is identical with this subspecies.

### Galerida cristata isabellina.

Galerita cristata isabellina Bp. Consp. Av. i. 1850, p. 245: Nubia.

Galerita cristata (Linn.); Butler, Ibis, 1905, p. 309.

[B. coll.] 11 Khartoum Feb. Apl. July Oct. Dec., 2 Omdurman Apl. Kh.

There are two Crested Larks in the Chapman and Lynes collection from the Sinkat-Erkowit plain which are quite different from the others from the Red Sea Province. One especially is exceedingly pale, but both are paler isabelline than even G. c. isabellina from Khartoum, and very much paler than G. c. eritreæ.

There is also one bird in the same collection from the White Nile in Lat. 15° N. This, which one would expect to be the pale form, G. c. isabellina, is not, but is darker, resembling on the back G. c. eritreæ, but with the throat more finely streaked. We have no other specimens from south of Khartoum.

# Galerida cristata altirostris.

Galerita altirostris Brehm, Vogelfang, 1855, p. 124: Upper Egypt.

Dr. Hartert states (Nov. Zool. xxiv. 1917, p. 440) that G. c. altirostris Brehm also occurs in the northern part of the Sudan, along the Dongola bend of the Nile. The type was obtained near Ambukol, and others in the Tring Museum were collected at Merowe, also in Dongola.

### Calendula dunni.

Calendula dunni Shelley, Bull. B. O. C. xiv. 1904, p. 82: Kordofan.

This species was discovered at the Ogageh Wells in

western Kordofan in November 1902 by Major W. H. Dunn. It bears a remarkable superficial resemblance to *Mirafra cordofanica*, which occurs at the same place. It is not represented in the present collections.

### Ammomanes cinctura arenicolor.

Ammomanes arenicolor (Sund.); Shelley, B. A. iii. p. 103; Butler, Ibis, 1905, p. 310.

- [B. coll.] 2 25 miles west of Omdurman Jan., 1 Omdurman Mch. Kh.
- [C. & L. coll.] 1 Battlefield of Omdurman Mch. Kh.; 2 Sinkat Mch., 2 Port Sudan Apl. R.S.

The birds from Omdurman are less leaden and more reddish in tone above and below, and we thought at one time they might be worthy of subspecific distinction; but similar birds are to be found in the large series of the Larks at Tring from certain spots in the Algerian Sahara, and there seems to be hardly sufficient grounds for separation.

As the light-coloured group of these Larks is very distinct from the Indian A. phænicura, we prefer to place them as subspecies of A. cinctura, the form from the Cape Verde Islands.

We recognize the following:-

Ammomanes cinctura cinctura (Gould): Cape Verde Is.

- A. c. arenicolor (Sund.): Algerian Sahara and Tunis to Palestine and the Nile valley.
- A. c. pallens Le Roi, apparently confined to the Bayuda desert, north of Khartoum.
- A. c. zarudnyi (Hartert): Persia and Baluchistan.

# Ammomanes cinctura pallens.

Ammomanes phænicura pallens Le Roi, O. M. xx. 1912, p. 6.

There is a single example of this form in the Tring Museum, obtained by Dr. Koenig in the Bayuda desert north of Khartoum.

It is smaller and paler than A. c. arenicolor.

#### Ammomanes deserti samharensis.

Ammomanes samharensis Shelley, B. A. iii. 1902, p. 99: Amba.

Ammomanes deserti (Licht.); Butler, Ibis, 1909, p. 393.

- [B. coll.] 3 Bir Nurayet Nov., 2 Bir Shigrib Nov., 1 Bir Terfawi Nov., 1 Nigeim Nov. Ber.; 3 Erba Mch., 2 Khor Arbat May, 1 Jebel Bawati May, 1 Jebel Karbush Mch. R.S.
- [C. & L. coll.] 6 Sinkat Mch., 1 Erkowit Apl., 1 Kamobsana Dec. R.S.

A careful comparison of these Desert-Larks with those in the British Museum convinces us that they are identical with the form described by Shelley as A. samharensis from Amba in the highlands of what is now Eritrea, the type of which is in the Museum.

Hartert considers this race identical with A. assabensis Salv. from Asseb on the southern Abyssinian coast near the straits of Beb el Mandeb, but we believe them to be quite distinct, as we have examples in the Museum from Hensa and Somadu in northern Somaliland, which were compared with specimens of A. assabensis sent by Salvadori, and were pronounced identical. These are very much darker than the northern Abyssinian and Port Sudan birds. From southern Somaliland comes A. d. akeleyi Elliot, quite a distinct paler race.

# Ammomanes deserti erythrochroa.

Ammomanes lusitana erythrochroa Reichw. J. f. O. 1904, p. 307: Ambukol.

Ammomanes deserti (Licht.); Butler, Ibis, 1905, p. 310.

[B. coll.] 1 25 miles west of Omdurman Jan. Kh.

# Pyrrhulauda leucotis leucotis.

Pyrrhulauda leucotis (Stanley); Shelley, B. A. iii. p. 86; Butler, Ibis, 1909, p. 76.

[B. coll.] 2 Wau Mch. Apl. B.G.; 1 Mongalla.

[C. & L. coll.]
 White Nile lat. 9½° N. Feb., 3 near Tonga Feb. Mch., 3 mouth of Sobat river Jan. Feb., 2 near Lake No, Feb. U.N.

2 x

### Pyrrhulauda leucotis melanocephala.

Pyrrhulauda melanocephala (Licht.); Shelley, B. A. iii. p. 90; Butler, Ibis, 1905, p. 311, 1908, p. 216.

Pyrrhulauda lacteidorsalis Shelley; Butler, Ibis, 1905,

p. 313.

- [B. coll.] 2 Gedaref May Kas.; 18 Khartoum Feb. Apl. May July Aug. Sept. Oct. Nov.
- [C. & L. coll.] 6 near Sennar Dec. Sen.; 6 White Nile lat. 14° & 15° N. Jan., 1 Kaka Jan., 2 Renk Mch. U.N.
- P. l. melanocephala is the prevailing form at Khartoum; some birds, however, are intermediate, showing an approach to P. l. leucotis in the blackening of the lesser wing-coverts. The examples from Gedaref and three of those from Khartoum in the Butler series show this feature. The range of this race extends westwards to Senegambia, whence came the type. There are good typical examples in the Museum from Northern Nigeria.

In Abyssinia and on the upper Nile from Fashoda southwards this race is replaced by *P. l. leucotis*. The bird listed from Mongalla is undoubted *P. l. leucotis*; the two from Wau are probably so, but are too young to be identified with certainty.

P. lacteidorsalis is certainly nothing but a pale variation (see Butler, Ibis, 1905, p. 314). We have examined the type in the Tring Museum.

# Pyrrhulauda frontalis frontalis.

Pyrrhulauda frontalis Bonaparte, Consp. Av. i. 1850 p. 512: Nubia; Butler, Ibis, 1905, p. 310.

Pyrrhulauda butleri Shelley, Bull. B. O. C. xiii. 1903, p. 73: nr. Omdurman.

- [B. coll.] 1 Shendi Mch. Ber.; 1 Fatasha Feb., 3 Omdurman Mch. Nov. Kh.; 2 Hashaba May, Kor.
- [C. & L. coll.] 4 White Nile lat. 15° N. Jan. U.N.

We have examined the type of P. butleri and are satisfied that it is identical with P. f. frontalis.

### Pyrrhulauda frontalis melanauchen.

Pyrrhulauda frontalis (nec Bp.); Shelley, B. A. iii. p. 79. Pyrrhulauda melanauchen (Cab.); Butler, Ibis, 1908, p. 216, 1909, p. 393.

[B. coll.] 4 Port Sudan Apl. May, 1 Jebel Okwat Mch. R.S.

[C. & L. coll.] 5 Port Sudan Dec. R.S.

One example from Port Sudan in the Butler collection is entirely without the white frontal spot.

# Family Motacillide.

#### Motacilla alba alba.

Motacilla alba Linn.; Shelley, B. A. ii. p. 272; Butler, Ibis, 1905, p. 304, 1908, p. 213, 1909, p. 391.

[B. coll.] 11 Khartoum Feb. Oct. Nov. Dec.

[C. & L. coll.] 1 Kamisa Dec. Sen.; 1 mouth of Sobat river Jan. U.N.

A winter visitor, abundant and widely distributed.

#### Motacilla vidua.

Motacilla vidua Sundev.; Shelley, B. A. ii. p. 268; Butler, Ibis, 1905, p. 304, 1908, p. 213, 1909, p. 76.

[B. coll.] 1 Setit river May, Kas.; 3 Roseires Apl. & Aug., 2 Fazogli May, Sen.; 1 Khartoum Oct. Kh.; 2 Raffali Feb. B.G.

#### Motacilla cinerea cinerea.

Motacilla cinerea Tunstall, Orn. Brit. 1771, p. 2; British Isles.

Motacilla boarula auctorum.

Motacilla melanope Butler, Ibis, 1905, p. 305, 1908, p. 213.

[B. coll.] 1 Khartoum Oct.

[C. & L. coll.] 1 Erkowit Mch. R.S.

On migration, comparatively scarce (A. L. B.).

#### Motacilla flava flava.

Motacilla flava flava Linn.; Hartert, Vög. pal. Faun. p. 287.

[B. coll.] 2 Khor Arbat May 6 & 12, R.S.; 23 Khartoum Oct. 14 to Apl. 17.

A common winter migrant widely distributed (A. L. B.). A fine series of Yellow Wagtails showing a certain amount of variation. Among them are two (B.M. reg. no. 1915/12/24/1455-6) with the white superciliaries very nearly completely absent which we were inclined to identify with M. f. borealis, and another pair (B.M. reg. no. 1915/12/24/1436, 1429) with a strongly marked yellow eyebrow. These were submitted to Dr. Hartert, who has kindly examined them and pronounced them to be merely aberrant examples of M. f. flava.

#### Motacilla flava dombrowskii.

Motacilla flava dombrowskii (Tschusi); Hartert, Vög. pal. Faun. p. 289.

[B. coll.] 6 Khartoum Mch. 31 to Apl. 17, Kh.; 1 Gamiza Apl. 8, B.G.

Some of the Yellow Wagtails wintering in the Sudan appear to be of this race, which breeds in Roumania and is distinguished by its very black ear-coverts. Dr. Hartert agrees with us in this identification.

# Motacilla flava melanocephala.

Motacilla melanocephala Licht. Verz. Doubl. Zool. Mus. 1823, p. 36: Nubia; Butler, Ibis, 1909, p. 393.

Motacilla flava melanocephala Licht.; Hartert, Vög. pal. Faun. p. 296.

[B. coll.] 7 Khartoum Jan. Apl. Dec. Kh.; 1 Khor Arbat May, R.S.

[C. & L. coll.] 2 Lake No Feb. U.N.

A common winter migrant (A. L. B.).

# Motacilla flava melanogrisea.

Motacilla flava melanogrisea E. v. Homeyer; Hartert, Vög. pal. Faun. p. 296.

Motacilla melanocephala (nec Licht.); Butler, Ibis, 1905, p. 305.

[B. coll.] 2 Khartoum Mch. Dec.

The December bird has a pronounced white eye-stripe. This form has been previously recorded by Hartert from the Sudan.

Motacilla flava, subsp.?

[B. coll.] 1 Khor Arbat May 13, R.S.; 6 Khartoum Oct. 31 to Apl. 5.

[C. & L. coll.] 2 Singa Dec. Sen.; 1 Hassania I. Jan. 11, 1 Lat. 15° Jan. 9, W.N.; 1 Meshra Zeraf Jan. 23, U.N.

[Chr. coll.] 1 Yambio Mch. B.G.

These are all young birds and cannot be identified with any certainty.

The other races of Yellow Wagtails which in all probability pass through the Sudan, though they are not represented in these collections nor in the British Museum collection from this locality, are:—

- 1. M. F. CAMPESTRIS. This certainly occurs; it is reported by Butler (Ibis, 1905, p. 306) as common, also by Heuglin (Orn. Nordost-Afr. p. 322). Some of the young birds in the collection no doubt belong to this race.
- 2. M. F. BOREALIS. This bird also almost certainly occurs, although we have not been able to find an adult specimen which we could absolutely definitely assign to this race.
- 3. M. F. CINEREOCAPILLA. Hartert (Vög. pal. Faun. p. 293) reports an example from Lado. There is no reason why it should not occur on migration throughout the Nile valley.

It is possible that the resident Egyptian race, M. f. pygmaa, occurs sometimes in the Sudan, but we have as yet no evidence of it. We do not think the bird mentioned by Butler (Ibis, 1909, p. 392) belongs to this form, we believe it is a scarcely adult and rather small example of M. f. flava.

#### Anthus trivialis trivialis.

Anthus trivialis (Linn.); Shelley, B. A. ii. p. 299; Butler, Ibis, 1905, p. 306, 1908, p. 214, 1909, p. 76.

[B. coll.] 4 Khartoum Oct.; 1 Raffali Feb., 1 Kojali Mch. B.G.

[C. & L. coll.] 2 Erkowit Mch. Apl. R.S.

[Chr. coll.] 2 Yei Nov. L.E.; 1 Mt. Baginzi Mch. B.G.

### Anthus leucophrys gouldi.

Anthus gouldi Fraser, P. Z. S. 1843, p. 27: Cape Palmas, W. Africa; Shelley, B. A. ii. p. 307; Butler, Ibis, 1909, p. 76.

[B. coll.] 1 Kojali Feb. B.G.; 6 Mongalla May, July-Sept. Mon.

We have carefully examined the very large series of this species in the British Museum, and we have come to the conclusion that the list of races given by Zedlitz (J. f. O. 1911, p. 48) is correct, though we have not had the opportunity of examining examples from Cameroon. We think, however, that A. vaalensis is best treated as a separate species, as we have examples from Cape Colony and Natal, in the range of A. l. leucophrys. The Sudan birds are apparently indistinguishable from West African examples. They are certainly much nearer them than they are to A. l. omoensis or A. l. bohndorffi.

We are satisfied that the name Anthus pyrrhonotus of Vieillot, founded on a plate of Levaillant's, cannot stand for this species. The plate represents more likely a species of Mirafra, and Levaillant's assertion that it was the "enkelde leeuwerk" of the colonists is without doubt an error.

# Anthus sordidus, near hararensis.

Anthus nicholsoni hararensis Neum. J. f. O. 1906, p. 233: Abu Behr near Harar.

Anthus sordidus apud Butler, Ibis, 1908, p. 214.

[B. coll.] 1 Erkowit Mch. R.S.

[C. & L. coll.] 5 Erkowit Mch. Apl. R.S.

We agree with Professor Neumann's conclusions as to the subspecies of this bird, though, as Hartert points out (Nov. Zool. xxiv. p. 457), it must bear the name sordidus and not nicholsoni. The specimens before us, however, do not exactly agree with any race, though nearest to A. s. hararensis. They are somewhat less plainly striped on the back than the Harar form, and the young bird in the Butler collection is paler than usual. They would appear to be the least plainly striped form of A. sordidus, and may very likely have to bear another name.

#### Anthus rufulus cinnamomeus.

Anthus cinnamomeus Rüppell, N. Wirbelt. 1835, p. 103: Siemen, Abyssinia; Reichw. V. A. iii. p. 313.

This form of the Rufous Pipit, though not contained in the Butler, Chapman & Lynes, and Christy collections, occurs in the Sudan. There are examples in the Museum from Khartoum collected by Captain Dunn in March, and from Rejaf in the Lado Enclave collected by Emin Pasha in January.

# Anthus campestris.

Anthus campestris (Linn.); Shelley, B. A. ii. p. 317; Butler, Ibis, 1905, p. 306, 1908, p. 214.

[B. coll.] 2 Erkowit Mch., 1 Jebel Kerbosh Mch. R.S.; 5 Khartoum Mch. Apl. Oct., 1 Omdurman Feb. Kh.

[C. & L. coll.] 1 Sinkat Mch., 1 Erkowit Apl. R.S.; 1 Kamisa Dec., 1 near Sennar Dec. Sen.; 5 White Nile lat. 14° & 15° N. Jan., 1 Renk Mch. U.N.

A winter visitor, widely distributed.

#### Anthus cervinus.

Anthus cervinus (Pall.); Shelley, B. A. ii. p. 325; Butler, Ibis, 1905, p. 306, 1908, p. 214.

[B. coll.] 9 Khartoum, Jan. Mch. Apl. Oct. Nov. Dec.
[C. & L. coll.] 1 Port Sudan Dec. R.S.; 1 White Nile lat. 14° N. Jan. U.N.

Also a winter visitor.

#### Anthus richardi richardi.

Anthus richardi richardi Vieill.; Hartert, Vög. pal. Faun. p. 265.

Two examples of Richard's Pipit were obtained by R. McD. Hawker at Goz Abu Gumar, W.N., on 18 May, 1901 (cf. O.-Grant, Ibis, 1902, p. 412). This is the only Sudan record.

### Macronyx croceus.

Macronyx croceus (Vieill.); Shelley, B. A. iii. p. 4; Butler, Ibis, 1899, p. 76.

[B. coll.] 2 Meshra el Rek May, B.G.; 5 Mongalla, 1 Shambé Jan. Mon.; 2 Rejaf Feb. L.E.

[C. & L. coll.] 1 near Lake No Feb. U.N.

[Chr. coll.] 6 Yei Dec. L.E.; 1 Meridi Jan. B.G.

# Family NECTARINIIDÆ.

### Hedydipna platura platura.

Hedydipna platura (Vieill.); Shelley, B. A. ii. p. 16; Butler, Ibis, 1908, p. 210.

[B. coll.] 1 Moyen Jan. B.G. [Chr. coll.] 3 Meridi Feb. B.G.

# Hedydipna metallica.

Hedydipna metallica (Licht.); Shelley, B. A. ii. p. 15. Nectarinia metallica Butler, Ibis, 1905, p. 302, 1909, p. 391.

[B. coll.] 6 Khor Arbat May, 1 Erba Mch. R.S.; 1 Khartoum Dec.; 1 Roseires July, Sen.; 1 Bara Apl. Kor.

[C. & L. coll.] 2 Sinkat Mch., 1 Port Sudan Dec. R.S.; 3 Kamisa, Dec. Sen.

# Nectarinia pulchella.

Nectarinia pulchella Bouvier; Shelley, B. A. ii. p. 23; Butler, Ibis, 1905, p. 303, 1908, p. 210, 1909, pp. 75, 391.

[B. coll.] 2 Setit river May, Kas.; 5 Roseires May July Aug., 1 Abu Haraz May, Sen.; 5 Khartoum June July Oct. Dec.; 1 Pongo river Feb., 1 Chak Chak Feb.,

2 Raffali Feb., 2 Wau Mch. Apl. B.G.; 4 Mongalla July Sept.

[C. & L. coll.] 6 Kamisa Dec. Sen.; 1 Jebel Ahmed Aga Jan., 1 nr. Lake No Feb., 1 White Nile lat. 9½° N. Feb. U.N.

From this excellent series of dated skins it would appear that these Sunbirds retain their tails practically throughout the year until they become very worn in December when they are shed, and the new tail commences to sprout in January. The metallic breeding-dress commences soon after and is complete in from May to July. The winter birds resemble the females, but always retain traces of the metallic green on the shoulders and the long tail-feathers, which appear to be only lost for the annual moult.

### Nectarinia erythroceria.

Cinnyris erythrocerius (Heugl.); Shelley, B. A. ii. p. 49. [C. & L. coll.] 1 White Nile lat.  $9\frac{1}{2}^{\circ}$  N. Feb. W.N.

This species is not represented in the Butler collection, but there are in the Museum, a pair from Magungo, where the Nile leaves Albert Nyanza, and a male from Wadelai, farther north, collected by Emin. The Chapman and Lynes example is a female and was obtained still farther north, near Taufikia, and is almost certainly referable to this species, though identification of female Sunbirds with certainty is always a difficult matter.

Not uncommon in the "sudd" region of the Nile and farther south (A. L. B.).

# Cinnyris cupreus.

Cinnyris cupreus (Shaw); Shelley, B. A. ii. p. 36; Butler, Ibis, 1909, p. 75.

[B. coll.] 6 Roseires July, Aug. Sen.; 1 Kojali Feb. B.G.[Chr. coll.] 2 Yei Nov. Dec. L.E.; Tembura Apl., Meridi Feb. B.G.

# Cinnyris splendidus.

Cinnyris splendidus (Shaw); Shelley, B. A. ii. p. 45. [Chr. coll.] 2 Yambio Mch. B.G.

This bird has not previously been recorded from the Sudan, but was obtained about 150 miles west of Yambio by Bohndorff, at Zemio, in the Niam-Niam country. It is a West African form ranging from Senegambia to Gaboon.

# Cinnyris habessinicus habessinicus.

Cinnyris habessinicus (Hempr. & Ehr.); Shelley, B. A. ii. p. 46; Butler, 1909, p. 391.

[B. coll.] 6 Erkowit Mch., 7 Khor Arbat May, 1 Jebel Okokreb Mch. R.S.

[C. & L. coll.] 4 Sinkat Mch., 1 Kamobsana Dec. R.S.

# Cinnyris chloropygius orphogaster.

Cinnyris chloropygia orphogaster Reichenow, O. M. vii. 1899, p. 169: Bukoba, Victoria Nyanza.

[Chr. coll.] 1 Yambio Mch. B.G.

We are able to identify the following races of C. chloropygius from the material in the Museum :-

1. C. c. Chloropygius (Jard.): Type-locality, Niger river. Wing under 50 mm., and belly a dark olive.

Range. From the Niger to Angola. Gold Coast birds are intermediate between this and the following.

2. C. C. KEMPI O.-Grant, Trans. Zool. Soc. xix. 1910, p. 329: Sierra Leone. About the same size, but with much brighter olive underparts.

Range. Sierra Leone and Senegal.

3. C. c. ORPHOGASTER, vide supra. Resembling C. c. chloropygius, but considerably larger. Wing well over 50, average 53 mm.

Range. Lake region to the Welle and the Bahr el Ghazal.

4. C. c. bineschensis Neumann (O. M. 1903, p. 183: Upper Sobat valley, Abyssinia). We have seen the type of this subspecies now in the Tring Museum and it agrees with Neumann's diagnosis, but it is apparently only known from

one example, and it would be desirable to examine more before deciding on its validity.

5. C. c. PAUWELSI Dubois, Rev. Franç. d'Orn. ii. No. 22, 1911, p. 17: Baraka, north of Tanganyika. Stated by Reichenow to be near C. c. orphogaster, but with a shorter beak, and to have a marked violet band separating the colours of the breast.

Range. Tanganyika district. There is a bird collected by R. Grauer in the Tring Museum, from the forest west of Tanganyika, which appears to be identical with this race.

We cannot appreciate the distinctness of C. c. wellensis Reichw. J. f. O. 1912, p. 321, from the Welle.

Cinnyris osea butleri, subsp. n.

Closely resembling C. o. osea, but very much smaller (wing  $\beta$  averaging 49 against  $\beta$  osea 54 mm.), and with the lower breast and belly below the violet-metallic patch quite black without sheen, whereas in C. o. osea there is a distinct metallic sheen on that part.

Type, ♂♀, Kajo Kaji, Lado Enclave, Mch. 1915, B.M. reg. no. 1915/12/24/2345-6.

Measurements: Wing, ♂ 49-50, ♀ 48; bill, ♂ 14.5, ♀ 13.5; tail, ♂ 35, ♀ 30 mm.

Of a corresponding series of C. o. osea—wing, 353-56, 51-53; bill, 317-19, 16; tail, 40 mm.

[B. coll.] 4 Kajo Kaji Nov. Mch. L.E.

[Chr. coll.] 4 Yei Nov. Dec. L.E.; 1 Meridi Feb. B.G.

This is a very interesting discovery, as no form of *C. osea*, which ranges from Palestine to Aden, has hitherto been found in Africa.

A single specimen was sent to Mr. Butler by Capt. C. Graham; subsequently Mr. Butler himself found it in the same district. In a letter to Mr. Ogilvie-Grant, Butler writes as follows: "The Cinnyris I sent you I met with a few times on the Kajo Kaji plateau, but it was scarce and

very shy and restless. I succeeded in shooting three— & full plumage, & changing to full plumage, and one ?. It is a very lovely little thing, and I believe it is new. It certainly seems to be rather near C. osea, but the distance between the Palestine locality and Kajo Kaji (about 4° N.) is too great for it likely to be the same, and it seems much smaller."

We have not described this bird as a full species, as the distinction between it and C. o. osea is so slight; but, on the other hand, there appear to be no birds of this type between the Bahr el Ghazal and Arabia—a considerable gap.

### Cinnyris venustus fazoglensis.

Nectarinia fazoglensis Heuglin, Orn. N.O.-Afr. ii. 1873, Appen. p. lxx: Fazogli.

Cinnyris affinis Rüpp. (nec Shaw); Shelley, B. A. ii. p. 64. Cinnyris venustus fazoglensis (Heugl.); Reichenow, V. A. iii. p. 473.

The type of this Sunbird was obtained by the Duke of Württemburg at Fazogli. It is abundant in the Abyssinian plateau, whence the Museum has a good series. There is one example from Kordofan obtained from Verreaux, and it is also stated by Rüppell to occur there.

# Chalcomitra senegalensis cruentata.

Chalcomitra cruentata (Rüpp.); Shelley, B. A. ii. p. 100. [B. coll.] 8 Roseires Aug. Sen.

This subspecies is quite distinct from C. s. acik. The throat is not metallic throughout, but is black with a very small metallic spot sometimes present between the black throat and red chest.

On the presence or absence of this spot depends the distinction between C. s. cruentata and C. s. scioana Salvad. from Shoa, but the character does not seem to be constant. In the four Roseires males, three have the spot quite distinct, in a fourth it is absent, and this seems to be the case with Abyssinian birds as well.

### Chalcomitra senegalensis acik.

Nectarinia acik Hartmann, J. f. O. 1866, p. 205 : Djur, Bahr el Ghazal.

Chalcomitra acik (Antin.); Shelley, B. A. ii. p. 90; Butler, Ibis, 1908, p. 211, 1909, p. 75.

[B. coll.] 2 Makwak Jan. Apl., 2 Wau Jan. Mch.,

1 Kuanga's Feb., 2 Chak Chak Feb., 1 Raffali Feb.,

1 Kojali Feb. B.G.; 5 Sheik Tombé, 2 Mongalla,

2 Kenisa Jan. Mon.

[C. & L. coll.] 1 White Nile lat  $9\frac{1}{2}^{\circ}$  N. Feb. U.N.

[Chr. coll.] 10 Yei Nov. L.E.; 3 Tembura Apl. B.G.

This subspecies was named by Hartmann on Antinori's description, and should be attributed to the first-named author.

# Cyanomitra obscura, subsp.?

[Chr. coll.] 1 Mt. Baginzi, Mch. B.G.

This Sunbird has given us some trouble. It apparently belongs to the group without metallic colouring of which C. obscura and C. olivacea are the best-known forms. Neumann and Zedlitz recognize several races, and this single bird does not seem to fit into any of them. It agrees most nearly with the description of Neumann's C. o. neglecta (J. f. O. 1900, p. 297), from Kibwesi, in British E. Africa; this is paler than the West African C. o. obscura and the Abyssinian C. o. ragazzii, but we hesitate to identify it with this form, as we have found no examples of it in the Museum and the locality does not fit in with the identification.

# Cyanomitra verticalis viridisplendens.

Cinnyris viridisplendens Reichenow, J. f. O. 1892, pp. 54, 132: Bukoba, Victoria Nyanza.

[Chr. coll.] 3 Meridi Jan. Feb., 3 Yambio Mch., 1 Wau July-Aug. B.G.

This Sunbird has not been previously met with within the boundaries of the Sudan.

An examination of the material in the Museum leads us to the conclusion that there are four distinguishable races of this Sunbird:—

1. C. v. VERTICALIS (Lath.), the type-locality of which should doubtless be fixed at Senegal. Back more golden olive-green. Metallic colour of head rather more blue than green.

Distr. From Senegal to Gold Coast Colony.

2. C. v. CYANOCEPHALA (Certhia cyanocephala Shaw, Gen. Zool. viii. 1811, p. 203: Loango). Back rather darker and less golden; metallic colouring the same.

Distr. Cameroon to Gaboon, Angola, and North-western Rhodesia.

3. C. v. VIRIDISPLENDENS (Reichw.), v. supra. Back a duller olive-green; metallic colouring rather more green than blue.

Distr. From the southern Bahr el Ghazal through the Lake districts and the eastern part of the Belgian Congo.

4. C. v. ALINÆ Jackson, Bull. B. O. C. xiv. 1904, p. 94: Ruwenzori.

Back much brighter than either of the others with almost a rufous tinge; metallic colour deeper blue, and underparts considerably darker and pectoral tufts deeper yellow. This is a mountain-race confined to the slopes of Ruwenzori above 5500 ft. C. v. viridisplendens is found on the slopes below 6000 ft., so the subspecies must meet in this region. The two forms are so distinct that it is probable that they do not interbreed, in which case they should be regarded as distinct species.

We have found no bird exactly answering to the description of C. v. tanganjicæ Reichw. (J. f. O. 1915, p. 128).

# Anthreptes longmari haussarum.

Anthreptes longmari haussarum Neumann, J. f. O. 1906, p. 245: Agome Tongbe in Togoland.

Anthothreptes longuemarii apud Butler, Ibis, 1908, p. 211, 1909, p. 75.

[B. coll.] 1 Katta Jan., 1 Pongo river Feb., 1 Chak Chak, 2 Kojali Feb., 1 Wau Mch. B.G.

[Chr. coll.] 2 Wau July Aug. B.G.

Anthreptes longmari orientalis.

Anthreptes orientalis Hartlaub, J. f. O. 1880, p. 213: Lado.

[B. coll.] 1 Gigging May, 4 Sheik Tombé, 2 Mongalla Feb. July Sept. Mon.; 2 Lado Feb. Mch. L.E.

This race is easily distinguished from A. l. haussarum by its markedly smaller size; wing in males, under 70 against 75-81 mm., and by the considerably greater patch of metallic green on the wing-shoulders. It also has a green wash on the rump and lower back instead of the plain purple of A. l. haussarum. It is to be expected, however, that birds from the southern and eastern Bahr el Ghazal will show intermediate characteristics.

We follow the original spelling and call this species Anthreptes longmari, not Anthothreptes longuemarii.

The subspecific forms are listed by Zedlitz (J. f. O. 1916, p. 73), and we agree with his conclusions, so far as an examination of the birds in the British Museum helps us. The following are the forms recognized by him:—

- 1. A. L. LONGMARI Lesson: type-locality, Senegal.
- 2. A. L. HAUSSARUM Neumann, v. supra.

Distr. Liberia to Togo and eastwards to the Bahr el Ghazal.

3. A. L. Angolensis Neumann, J. f. O. 1906, p. 246: Duque de Braganza, Angola.

Distr. Angola east through Belgian Congo to Unjamwesi, east of Lake Tanganyika.

With this form we believe Anthothreptes carruthersi (O.-Grant, Bull. B. O. C. xix. 1907, p. 106: West shore of Tanganyika) is synonymous.

4. A. L. NYASSÆ Neumann, J. f. O. 1906, p. 247: near Zomba.

Distr. Nyasaland and Mashonaland.

5. A. L. ORIENTALIS, Hartlaub, v. supra.

Distr. Lado and Mongalla Provinces of the Sudan, Abyssinia, British East Africa, and German East Africa.

6. A. L. NEUMANNI Zedlitz, J. f. O. 1916, p. 75. Distr. Somaliland and south-east Abyssinia.

All these races seem fairly clear and well defined. We have not, however, had the opportunity of examining Senegal specimens, and, if they eventually prove to be indistinguishable from A. l. haussarum, the latter name must become a synonym.

Anthreptes aurantia appears to be the representative species in Cameroon and Gaboon.

# Anthreptes collaris hypodilus.

Nectarinia hypodilus Jardine, Contr. Orn. 1851, p. 153: Fernando Po.

Anthreptes collaris hypodilus (Jard.); Reichw. Vög. Afr. iii. p. 443.

Shelley (P. Z. S. 1888, p. 39) records an example of this Sunbird collected at Lado by Emin, 23 October 1885, but it does not appear to be in the Museum collections, where the subspecies is not represented by Sudanese examples.

# Family Zosteropidæ.

# Zosterops abyssinica abyssinica.

Zosterops abyssinica Guér. Ferr. et Gal.; Shelley, B. A. ii. p. 192 (part.); Butler, Ibis, 1908, p. 212.

[B. coll.] 8 Erkowit Mch. R.S.

[C. & L. coll.] 4 Erkowit Mch. Apl. R.S.

Zedlitz (J. f. O. 1911, p. 57) recognizes four races of this species.

- 1. Z. A. ABYSSINICA: Eritrea and North Abyssinia.
- 2. Z. A. OMOENSIS: South Shoa and the Omo valley.
- 3. Z. A. SOCOTRANA: Sokotra.
- 4. Z. A. ARABS: South Arabia.

Zosterops senegalensis senegalensis.

Zosterops senegalensis Bp.; Shelley, B. A. ii. p. 173 (part); Butler, Ibis, 1908, p. 212, 1909, p. 76.

Zosterops senegalensis senegalensis Bp.; Neumann, O. M. 1904, p. 110.

[B. coll.] 1 Pongo river Mch., 2 Moyen May, B.G. [Chr. coll.] 1 Yambio Mch. B.G.

Zosterops senegalensis tenella.

Zosterops tenella Hartlaub, J. f. O. 1865, p. 11: Keren, Eritrea.

[B. coll.] 4 Roseires July, Aug. Sen.

These Roseires White-eyes agree very well with the one from Lake Tsana in the Museum mentioned by Neumann in his review of the genus Zosterops (O. M. 1904, p. 109). They are slightly larger (wing,  $\mathfrak{P}$ , 57-59 mm.), and paler than Z. s. senegalensis (wing,  $\mathfrak{P}$ , 56-57 mm.). Z. icterovirens Württemb. from the Atbara is a synonym. The type is in the Berlin Museum.

# Family CERTHIIDÆ.

Salpornis salvadorii.

Salpornis salvadorii (Boc.); Shelley, B. A. ii. p. 260.

Emin obtained this bird at Langomeri, Tobbo, and Wadelai, all just about the southern boundary of the Sudan, near Nimule; also in the Makraka country, which is marked in the map in Reichenow's 'Vögel Afrikas' to the east of Rejaf, and well within our limits. It was described as distinct from the southern bird by Hartlaub (P. Z. S. 1884, p. 415) under the name S. emini.

One of the birds of Emin's collecting, marked "& Tobbo 22 v. 83," is in the Museum collection.

# Family PARIDÆ.

Parus niger leucomelas.

Parus leucomelas Rüpp.; Shelley, B. A. ii. p. 228; Butler, Ibis, 1905, p. 304, 1908, p. 212, 1909, p. 76.

SER. X .- VOL. VI.

[B. coll.] 7 Roseires April-Aug. Sen.; 3 Raffali Feb., 1 Menyah Jan. B.G.; 1 Rejaf Feb., 2 Kajo Kaji Mch. Apl. L.E.

[C. & L. coll.] 2 Kamisa Dec. Sen.

[Chr. coll.] 1 Mt. Baginzi, 4 Yambio Mch. B.G.; 2 Yei Nov. L.E.

This subspecies appears to range westward to the Gold Coast hinterland, but is replaced in the Gold Coast proper and in Senegambia by a smaller race (P. n. guineensis Shelley); eastward it ranges to Eritrea and northern Abyssinia and southward to Uganda. A list of the subspecies will be found in Wytsman's 'Genera Avium,' prepared by Hellmayr (p. 23).

### Anthoscopus musculus.

Ægithalus musculus Hartl.; Shelley, B. A. ii. p. 254.

[B. coll.] 1 Sheik Tombé, summer, U.N.

Previously obtained by Emin at Lado within our limits.

### Anthoscopus punctifrons.

Ægithalus punctifrons Sund.; Shelley, B. A. ii. p. 249.

[B. coll.] 1 Roseires July, 1 Abu Haraz May, Sen.

[C. & L. coll.] 3 Kamisa Dec. Sen.; 1 White Nile lat. 14° N. Jan., 1 Lake No Feb. U.N.

This Tit was obtained by Mr. Charles Rothschild, and also by Messrs. Witherby and Hawker and Dunn on the White and Blue Niles, and extends westward to Lake Chad; but there is no evidence that it occurs in Abyssinia, though called the Abyssinian Penduline Tit by Shelley.

# Anthoscopus parvulus.

Ægithalus parvulus Heugl.; Shelley, B. A. ii. p. 250.

[B. coll.] 1 Rejaf Apl. L.E.

A rare bird previously obtained by Emin at Rejaf and at Kiri; also by Alexander on the Bamingui river, a tributary of the Shari river, near Lake Chad. Heuglin's types came from the Bahr el Ghazal.

# Family LANIIDÆ.

Corvinella corvina affinis.

Corvinella affinis Heugl. Orn. Nordost-Afr. 1871, p. 48: Upper Nile.

Corvinella corvina apud Butler, Ibis, 1908, p. 225, 1909, p. 80.

[B. coll.] 1 Katta, 1 Ukanda Jan., 2 Chak Chak Feb. Mch., 2 Wau, 1 Khor Gitti Mch. B.G.; 1 Mongalla, summer.

[Chr. coll.] 1 Mt. Baginzi Mch., 2 Wau July-Aug. B.G.; 2 Yei Nov. L.E.

The races of this bird appear to be:-

C. c. corvina Shaw: Senegal.

C. c. togoensis Neum. : rest of N.W. Africa.

C. c. affinis Heugl.: Upper Nile, Uganda, and Bahr el Ghazal.

#### Lanius minor.

Lanius minor Gm.; Sclater in Shelley's B. A. v. p. 276.

[B. coll.] 4 Khartoum Aug.-Oct.

August seems a very early date for these birds to be on migration. This species seems to be uncommon in the Sudan. In fact, we can find no notice of its occurrence since Heuglin's record, though the Museum possesses one other example from Sennar.

Butler states, however, that it is widely distributed in winter from Khartoum to the Lado Enclave.

Lanius excubitor leucopygos.

Lanius leucopygos Hemp. & Ehr.; Sclater in Shelley's B. A. v. p. 272.

Lanius leuconotus Brehm; Butler, Ibis, 1905, p. 327.

[B. coll.] 1 Khartoum Feb.; 1 Bara Dec. Kor.

[C. & L. coll.] 1 White Nile lat. 14° N. Jan. W.N.

This is the resident form of Grey Shrike in the Nile valley and regions west to Lake Chad.

Lanius excubitor elegans.

Lanius elegans Swains.; Sclater in Shelley's B. A. v. p. 271.

Lanius leuconotus (non Brehm); Butler, Ibis, 1908, p. 225, 1909, p. 394.

[B. coll.] 1 Jebel Bawati May, R.S.

[C. & L. coll.] 9 Sinkat Mch. Apl. R.S.

Also a resident species of Grey Shrike, replacing L. e. leucopygos to the north and extending through Egypt to Tunis.
Both Butler and Chapman and Lynes found it breeding
in the Red Sea province near Port Sudan.

### Lanius excubitor pallidirostris.

Lanius pallidirostris Cassin; Sclater in Shelley's B. A. v. p. 270.

- [B. coll.] 1 Wadi Mogileb Nov. Ber.; 2 Jebel Kerbosh Mch., 1 Kamobsana Mch., 1 Jebel Okokreb Mch., 1 Gebeit Mch. R.S.
- [C. & L. coll.] 2 Kamisa Dec., 1 20 m. above Sennar Jan. Sen.

A wintering migrant from Transcaspia, where it breeds. Distinguished by the rosy tinge on its breast and by its pale bill.

### Lanius excubitor aucheri.

Lanius aucheri Bonaparte; Sclater in Shelley's B. A. v. p. 268.

- [B. coll.] 1 Bir Nurayet Nov., 1 Wadi Huriyeb Nov. Ber.
- [C. & L. coll.] 1 Port Sudan Dec., 2 Sinkat Mch. R.S.

This species breeds in Persia and perhaps in Arabia; it also winters in north-east Africa. It is darker on the back, has a black bill, and the under parts washed with grey rather than rosy, as compared with *L. e. pallidirostris*.

#### Phoneus senator niloticus.

Phoneus niloticus (Bonaparte); Sclater in Shelley's B. A. v. p. 287.

Lanius paradoxus apud Butler, Ibis, 1905, p. 328, 1908, p. 226, 1909, p. 80 (part).

[B. coll.] 1 Jebel Kerbosh Mch. R.S.; 1 Kamlin Mch. B.N.; 2 Disa Apl. Sen.; 1 Renk Jan. U.N.; 1 Gadein Jan.; 1 Ayum, 3 Raffali Feb., 1 Moyen Apl. B.G.

[C. & L. coll.] 1 Sinkat Mch. R.S.; 1 Kamisa, 1 Singa, 1 Eneikliba Dec. Sen.; 1 Renk Mch. U.N.

[Chr. coll.] 1 Meridi Jan. B.G.

### Phoneus senator senator.

Phoneus senator (Linn.); Sclater in Shelley's B. A. v. p. 289.

Lanius paradoxus Brehm; Butler, Ibis, 1909, p. 80 (part.).
[B. coll.] 1 Raffali Feb. B.G.

This seems to be the first record for the Sudan, although it has been taken at Heluan in Egypt, and also in Tripoli and Tunis. Its usual winter-quarters are in West Africa.

#### Fiscus nubicus.

Fiscus nubicus (Licht.); Sclater in Shelley's B. A. v. p. 244.

Lanius nubicus Butler, Ibis, 1905, p. 328, 1908, p. 225, 1909, pp. 80, 394.

- [B. coll.] 1 Erkowit Mch. R.S.; 1 Blue Nile; 3 Khartoum Jan. Oct.; 1 Jebelein Nov., 1 Hillet Abbas Dec., 2 Kosti Jan. W.N.; 2 near Renk Dec. Jan. U.N.
- [C. & L. coll.] 1 Sinkat Mch. R.S.; 1 Singa, 2 Sennar, 1 Kamisa Dec. Sen.; 1 near Jebelein Jan. W.N.

### Fiscus collaris smithi.

Fiscus smithi (Fraser); Sclater in Shelley's B. A. v. p. 252. [Chr. coll.] 5 Yei Nov. Dec. L.E.

Smith's Fiscal Shrike is a West African form extending eastwards to the Lado, where it was first obtained by Emin. These birds are certainly nearer F. c. smithi than F. c. humeralis, which is found in Abyssinia.

Fiscus excubitorius princeps.

Fiscus excubitorius princeps (Cab.); Sclater in Shelley's B. A. v. p. 265.

Fiscus excubitorius Butler, Ibis, 1905, p. 327, 1908, p. 225, 1909, p. 80.

- [B. coll.] 1 Taufikia Mch. U.N.; 1 Mongalla summer; 1 Atwot, 1 near Rumbek Jan., 1 Chak Chak Feb., 3 Doleiba May, B.G.
- [C. & L. coll.] 2 south of Jebelein Jan. W.N.; 1 White Nile lat.  $10\frac{1}{2}^{\circ}$  N. Jan. U.N.

The birds from Ruwenzori identified by Ogilvie-Grant as F. intercedens Neum. appear to be identical with this race, whose range extends from the White Nile valley to Uganda.

#### Enneoctonus collurio.

Enneoctonus collurio (Linn.); Sclater in Shelley's B. A. v. p. 281.

Lanius collurio Butler, Ibis, 1905, p. 328.

[B. coll.] 6 Khartoum Aug.-Oct.

The earliest date is the 13th of August—a young bird, but, of course, fully fledged; others from the 23rd onwards. These dates seem early for winter visitors, but it must be remembered that the Red-backed Shrike leaves its breeding-places rather early.

# Enneoctonus gubernator gubernator.

Enneoctonus gubernator (Hartl.); Sclater in Shelley's B. A. v. p. 285.

[Chr. coll.] 5 Yei Nov. Dec. L.E.

A Shrike obtained by Alexander near Lake Chad has a much paler grey head and appears to be referable to *E. g. strümpelli* Reichw. from the interior of Cameroon. But the birds from the Gold Coast hinterland appear to be indistinguishable from those of the upper Nile, although the paler form intervenes as far as locality is concerned.

Otomela cristata isabellina.

Otomela isabellina (Hempr. & Ehr.); Sclater in Shelley's B. A. v. p. 293.

Lanius isabellinus Butler, Ibis, 1909, p. 394.

- [B. coll.] 2 Erkowit Mch. Apl., 1 Port Sudan Apl., 1 Khor Arbat May R.S.; 1 Shendi Mch. Ber.; 3 Mongalla summer; 1 Lado Feb.
- [C. & L. coll.] 1 Port Sudan Dec. R.S.; 3 White Nile lat.  $9\frac{1}{2}$ °-12° N., 1 Kosti Jan. W.N.; 1 Tonga, 1 mouth of Bahr el Zeraf, 1 Lake No Feb. U.N.

Otomela cristata phœnicuroides.

Otomela phænicuroides (Severzow); Sclater in Shelley's B. A. v. p. 295.

Lanius isabellinus (nec H. & E.); Butler, Ibis, 1908, p. 226 (part.).

[B. coll.] 2 Khartoum Feb.; 1 Kenisa Feb. Mon.

These two forms of O. cristata are somewhat difficult to distinguish, and some birds are doubtless intermediate. The breeding-ranges of both are in western Asia and they only occur in Africa in winter. The present subspecies has not previously been definitely recorded from the Sudan, and Mr. Butler did not distinguish it from the common O. c. isabellina.

# Malaconotus poliocephalus catharoxanthus.

Malaconotus poliocephalus catharoxanthus Neum.; Sclater in Shelley's B. A. v. p. 407.

Malaconotus poliocephalus apud Butler, Ibis, 1905, p. 329.

Laniarius catharoxanthus Butler, Ibis, 1908, p. 226, 1909, p. 81.

[B. coll.] 1 Gallabat May, Kas.; 1 Wau, 1 near Rumbek Jan., 1 Chak Chak Feb., 1 Kuanga's, 1 Tembura Mch. B.G; 1 near Rejaf Apl. L.E.

[Chr. coll.] 3 Meridi Jan. Feb., 1 Mt. Baginzi, 7 Yambio Mch. B.G.

The birds from the Bahr el Ghazal show an approach to the typical form from West Africa, and are not so pale as those from Abyssinia and the Blue Nile districts. It is, therefore, unfortunate that Neumann described this form from the Bahr el Ghazal and not from the paler Abyssinian bird.

A young fledgling from Yambio with the tail just sprouting resembles the adult in colour, but is paler above and below and the grey of the head not so clear.

### Chlorophoneus sulfureopectus.

Chlorophoneus sulfureopectus (Lesson); Sclater in Shelley's B. A. v. p. 427.

Laniarius sulphureipectus Butler, Ibis, 1908, p. 227, 1909, p. 81.

[B. coll.] 2 Roseires July Sept. Sen.; 1 Bringi's, 1 Raffali, 1 Kojali Feb., 1 Tembura, 1 Wau Mch. B.G.; 6 Mongalla Jan.; 2 Lado Feb.

[Chr. coll.] 6 Meridi Jan. Feb., 6 Yambio Mch., 1 Wau July-Aug. B.G.

It seems very doubtful if it is possible to distinguish any racial forms of the Orange-breasted Bush-Shrike. C. s. similis was considered distinct in Shelley's 'Birds of Africa,' but even in this case it was remarked that it was not always distinguishable from the West African typical form, and the examination of the very large series now in the British Museum only confirms us in this belief.

# Rhodophoneus cruentus cruentus.

Rhodophoneus cruentus (Hempr. & Ehr.); Sclater in Shelley's B. A. v. p. 392; Butler, Ibis, 1908, p. 227, 1909, p. 394.

- [B. coll.] 3 Erkowit Mch., 1 Port Sudan May, 3 Jebel Okokreb Mch., 1 Jebel Karbush Mch., 2 Gebeit Mch. R.S.
- [C. & L. coll.] 4 Sinkat Mch., 1 Port Sudan April, R.S.

Rhodophoneus cruentus kordofanicus, subsp. nov.

Three Rosy-patched Shrikes, two males and one female, collected by Capt. W. H. Dunn, at Ogayeh Wells, in western Kordofan, on 13 November 1902, are very much paler than the typical race from the Red Sea littoral, and certainly deserve recognition as a distinct race.

The colour of the upper side is very pale brownish grey as opposed to the pale brown of the typical race; this is also the case with the region of the face behind the eye, which, except that the ear-coverts are slightly tinged with brownish, is almost entirely white. The measurements are apparently identical. Measurements: 3 wing, 95; 9,90 mm.

Types as above: 3, B.M. reg. no. 1903/2/4/5; 2, 1903/2/4/3.

Laniarins æthiopicus æthiopicus.

Laniarius æthiopicus (Gmel.); Sclater in Shelley's B. A. v. p. 312; Butler, Ibis, 1905, p. 329.

[B. coll.] 1 Gallabat May, Kas.

Laniarius æthiopicus major.

Laniarius major (Hartl.); Sclater in Shelley's B. A. v. p. 306.

Laniarius æthiopicus (non Gmel.); Butler, Ibis, 1908, p. 226, 1909, p. 80.

[B. coll.] 1 Wau Jan., 3 Raffali Feb. B.G.

[Chr. coll.] 5 Meridi Jan. Feb., 2 Yambio Mch., 1 Wau July-Aug. B.G.; 2 Yei Dec. L.E.

The Boubou Shrike of the Bahr el Ghazal can at once be distinguished from that of Kassala by the presence of a white edging to the secondaries.

The Boubou Shrike forms a well-defined group of subspecies with fairly clearly marked characteristics.

An examination of the specimens in the British Museum leads us to the following conclusions as to the races:—

L. Æ. ÆTHIOPICUS (Gmel.). White of the wing extending over the primary and secondary coverts; no white on the secondaries.

Range. Abyssinia north to Kassala and Eritrea, south to Shoa and Somaliland.

L. Æ AMBIGUUS (Mad.). White on the wing confined to the primary coverts. Size generally smaller, wing about 90 mm.

Range. East Africa between the coast-belt and the Rift valley.

L. E. SUBLACTEUS (Cass.). No white on the wing; smaller, wing about 78 mm.

Range. Coast-belt of East Africa from Lamu to Dar-es-Salam.

L. E. Mossambicus (Reichw.). Wing with white on the inner secondaries as well as the coverts. Wing about 90 mm.

Range. Mozambique, Nyasaland, and Rhodesia to about the region of the Victoria Falls.

L. Æ. GUTTATUS (Hartl.). Like mossambicus, but pure white on the underparts.

Range. Angola east to Lake Ngami and the Victoria Falls region.

L. E. BICOLOR (Hartl.). Like guttatus, but no white on the inner secondaries.

Range. Gaboon.

L. E. MAJOR (Hartl.). With white on the coverts and secondaries; like mossambicus, but larger. Wing about 100 mm.

Range. West Africa south to Cameroon, east to Uganda, East Africa, west of the Rift valley and the Bahr el Ghazal.

L. E. TURATII (Verr.). No white on the wing, and larger than the east coast sublacteus—about 105 mm.

Range. Portuguese Guinea and probably Senegal.

We have no specimens from the type-locality of L. æ. somaliensis Reichw. from S. Somaliland, and so cannot state whether the smaller size is constant.

### Laniarius erythrogaster.

Laniarius erythrogaster (Cretzschm.); Sclater in Shelley's B. A. v. p. 325; Butler, Ibis, 1905, p. 329, 1908, p. 227, 1909, p. 81.

[B. coll.] 1 Gallabat May, Kas; Renk Mch., Jebel Ahmed Aga Feb., Taufikia Feb., Lake No June, U.N.; Chak Chak Feb., Atwot Jan, Wau Mch. B.G.; 2 Mongalla.

[C. & L. coll.] 2 Kamisa Dec. Sen.; 1 nr. Lake No, Feb. U.N.

[Chr. coll.] 2 Wau July-Aug. B.G.

A common species.

### Dryoscopus gambensis malzacii.

Dryoscopus malzacii (Heugl.); Sclater in Shelley's B. A. v. p. 346 (part); Butler, Ibis, 1908, p. 226, 1909, p. 81.

[B. coll.] 1 Ukanda Jan., 3 Chak Chak Feb. Mch.,
1 Tembura, 1 Kojali Mch. B.G.; 1 Mongalla Feb.;
3 Lado, 2 Rejaf Feb. L.E.

[Chr. coll.] 5 Meridi Jan. Feb., 2 Yambio, 3 Mt. Baginzi Mch., 4 Wau July Aug. B.G.

# Dryoscopus gambensis erythreæ.

Dryoscopus malzacii erythreæ Neumann, J. f. O. 1899, p. 412: Salamona, Eritrea.

[B. coll.] 4 Roseires July Aug., 1 Jebel Fazogli May, Sen.

[C. & L. coll.] 1 Kamisa Dec. Sen.

We have examined the material in the British Museum of the forms of *D. gambensis*. Our conclusions only differ from those arrived at by the senior author in his revision of the group in the fifth volume of Shelley in regarding the Abyssinian and Blue Nile forms as distinct from that of the White Nile valley and westwards. We regard *Dryoscopus angolensis* and *D. cubla* each with several races as forming quite distinct groups. The races of *D. gambensis* can only

636

be satisfactorily determined on the females, and are as follows:—

# 1. D. G. ERYTHREÆ Neum. (see above).

Female with an almost black back and the under surface almost white faintly washed with yellow.

Range. Abyssinia westwards to Sennar and the Sobat river.

### 2. D. G. NYANZÆ Neumann: Kavirondo.

Female like D. g. erythreæ, but back not black but brownish, underparts tawny ochraceous.

Range. Uganda and British East Africa west of the Rift valley.

# 3. D. G. MALZACII (Heugl.): White Nile.

Female with the back dark ashy grey (lighter than D. g. nyanzæ) and the underparts more tawny.

Range. Upper White Nile valley west through the Bahr el Ghazal to the Shari river region and Lake Chad.

# 4. D. G. GAMBENSIS (Licht.): Senegambia.

Female with the back earthy-brown with a contrasting ashy-grey head; below tawny orange.

Range. Senegal to North Nigeria.

# 5. D. G. congicus Sharpe: Condé, Gaboon.

Female with the head dark slaty strongly contrasting with the earthy-brown back; below strongly washed with rich rufous tawny, especially on the chest.

Range. Portuguese Congo, probably ranging north into Gaboon.

# Tschagra senegala senegala.

Tschagra senegala (Linn.); Sclater in Shelley's B. A. v. p. 362.

Telephonus senegalus (Linn.); Butler, Ibis, 1909, p. 81.

[B. coll.] 1 nr. Pongo river Feb., 1 Tembura Mch. B.G. [Chr. coll.] 2 Tembura Apl., 4 Meridi Jan. Feb. B.G.;

3 Yei Nov. L.E.

We still maintain that it is impossible to recognize any satisfactory races of this Shrike from south, west, or east Africa. There is a certain amount of variation in the depth of tone of the colour of the back; the darkest birds are found in Angola, Belgian Congo and Uganda, and the tropical coastbelt of British East Africa, while lighter-coloured birds are found from Senegal to Northern Nigeria, Bahr el Ghazal, and north and central East Africa. The birds from South Africa are also of the paler type, but there is much variation individually, and possibly races may be in the process of formation, but we propose to leave them united for the present.

Tschagra senegala sudanensis, subsp. n.

[B. coll.] 2 Roseires July, 1 Famaka May, Sen.; 1 Bahr el Zeraf Jan., 1 Khor Filus June, U.N.; 1 Shambé Dec., 3 Bor, 1 Abu Kika May, Mon.

[C. & L. coll.] 1 nr. Tonga Feb., 2 White Nile lat. 9½° N. Feb., 1 mouth of Zeraf river Feb., 1 Lake No Mch. U.N.

The discrimination of the races of the Tschagra Shrikes of north-eastern Africa have caused us a good deal of trouble. There is a very good series in the British Museum, and we have after considerable hesitation decided that three races should probably be recognized, and that Neumann's name T. s. erlangeri cannot be used for the Sudanese bird. We are therefore compelled to find a new name for the form. The following is a brief synopsis of the races from this part of Africa:—

TSCHAGRA SENEGALA HABESSINICA (Hempr. & Ehr.): Abyssinian coast-lands.

We regard Laniarius blanfordi Sharpe as a synonym. A smaller race, wing averaging 78 mm. Colour of the back distinctly brown, often tinged with rufous; below grey, sometimes a slight wash of olive, but never any rufous.

Range. The northern districts of Abyssinia and Eritrea.

T. s. ERLANGERI (Neum.): Abaja Lake.

A slightly larger race with wing averaging 82 mm. Colour of the back very close to T. s. habessinica, but with a slightly lighter region on the nape contrasting with the darker back; below with a distinct tinge of rusty brown, not pure grey.

Range. The southernmost part of Abyssinia from Lake Abaja to Lake Rudolf east to the Kullo countries (see map, Ibis, 1913, pl. xii.).

T. s. sudanensis, subsp. nov.

Differs from both T. s. habessinica and T. s. erlangeri in having the back a greyer shade of brown and at once distinguishable if a series is examined. Below always a clear grey without any olive or brownish. Size large, wing averaging 85 mm.

Type, a male, Mongalla, Sudan (coll. A. L. Butler), July-Sept. 1908, B.M. reg. no. 1915/12/24/1357. Wing 91 mm.

Range. This race is found throughout the central districts of Abyssinia from the region about Lake Tsana south to Lake Zwai, and westwards to Sennar and the White Nile. Birds from the Harrar district to the east of Adis Ababa and Lake Zwai are intermediate and approach T. s. habessinica. Those from Lake Zwai southwards are nearer to T. s. erlangeri.

Neumann doubtless intended to include this form in his T. s. erlangeri, but when the large Abyssinian series of skins in the British Museum are spread out it is at once evident that the birds from the southern lake-districts, whence came the Neumann type, can be distinguished from those of the highlands of Shoa, and that the Sudanese birds agree with these last.

Tschagra senegala remigialis.

Tschagra remigialis (Finsch & Hartl.); Sclater in Shelley's B. A. v. p. 369.

Telephonus remigialis Butler, Ibis, 1905, p. 329.

- [B. coll.] 1 Shendi Mch. Ber.; 1 Wad Medani, Apl. B.N.; 1 Khartoum Mch.; 3 Renk Jan. Feb. Mch. U.N.
- [C. & L. coll.] 4 Kamisa, 1 Sennar, 1 Eneikliba Dec. Sen.; 2 White Nile Jan. Mch.

We have treated this bird as a subspecies of *Tschagra* senegala, but it is such a sharply defined form that it will in all probability prove to be a distinct, though representative, species.

### Tschagra australis emini.

Tschagra australis emini (Reichw.); Sclater in Shelley's B. A. v. p. 374.

[Chr. coll.] 1 Meridi Feb. B.G.

No form of *T. australis* has hitherto, so far as we are aware, been noticed in the Sudan, though Alexander obtained an example at Mobbai on the Ubangi river to the west and Jackson at Entebbe to the south. The Meridi bird has a somewhat lighter crown than examples from Uganda, but as it is only a single specimen we would not propose to give it a name.

#### Antichromus minutus minutus.

Antichromus minutus (Hartl.); Sclater in Shelley's B. A. v. p. 387.

Telephonus minor apud Butler, Ibis, 1908, p. 227.

- [B. coll.] 1 Bahr el Jebel Mch., 1 Bor Feb. Mon.; 1 Rejaf, 1 Kaia R. Feb. L.E.
- [C. & L. coll.] 1 Lake No, 2 White Nile lat.  $9\frac{1}{2}^{\circ}$  N. Feb. U.N.
- [Chr. coll.] 3 Meridi Jan. Feb., 1 Yambio Mch., 1 Yei Nov. L.E.

#### Nicator chloris chloris.

Lanius chloris Valenc. Dict. Sci. Nat. xl. 1826, p. 226: Yalam, Senegal.

Nicator chloris (Valenc.) Sclater in Shelley's B. A. v. p. 436.

[Chr. coll.] 3 Yambio Mch. B.G.

This species is new to the Bahr el Ghazal; it was previously known to range to Uganda and the Welle river.

#### Nilaus afer afer.

Nilaus afer (Lath.); Sclater in Shelley's B. A. v. p. 456; Butler, Ibis, 1905, p. 329, 1908, p. 226, 1909, p. 80.

- [B. coll.] 3 Roseires Aug. Sept. Sen.; 2 nr. Fatasha Jan. Kh.; 1 Jebel Melbis Apl. Kor.; 1 Khor Filus June, U.N.; 4 Mongalla Jan. and summer, 6 Sheik Tombé summer, Mon.; 1 Moyen Jan., 1 Chak Chak Feb., 2 Wau Apl. B.G.
- [C. & L. coll.] 1 Singa, 6 Kamisa Dec., 1 nr. Sennar Jan. Sen.; 1 Kosti Jan. W.N.; 1 nr. Lake No Feb. U.N.
- [Chr. coll.] 1 Meridi Feb., 2 Yambio Mch., 1 Wau July-Aug. B.G.

# Family PRIONOPIDÆ.

Eurocephalus rüppelli rüppelli.

Eurocephalus rueppelli Bp.; Sclater in Shelley's B. A. v. p. 447.

[B. coll.] 9 Mongalla July-Sept.

In the J. f. O. 1915, pp. 46-50, Count Zedlitz gives an interesting review of the races of this Shrike. We ourselves are inclined, however, to consider *E. anguitimens* as specifically distinct.

As regards the northern forms, E. r. rüppelli from the upper White Nile is distinguished by its somewhat—at certain times of year considerably—paler upper parts and at all times by the small amount and paleness of the brown on the underside.

E.r. erlangeri from Abyssinia and northern Somaliland is distinguished by its darker upper parts and the larger and darker brown marks on the underside.

E. r. böhmi from western German East Africa and Lake Nyasa is considerably paler on the back, more like E. r. rüppelli, but is duskier below and slightly larger. Wing averages 131 against 127 mm.

We cannot, even with the large series before us, appreciate the other two races, E. r. deckeni from southern Somali to Voi and E.r. fischeri from the rest of East Africa. The coloration seems to vary considerably with the time of year, and the size is also not a reliable guide. For instance, in the series collected by Butler in the summer, nearly all the examples are paler than those collected by Emin in March, and the wing-measurements, which Zedlitz gives as 119-126 mm. for the race, are actually 122, 125, 127, 127, 127, 127, 128, 129, 130. We therefore consider that E. r. rüppelli ranges from Mongalla through British East Africa, and from Victoria Nyanza to the mouth of the Tana river to the eastern half of German East Africa. On higher ground—as, for instance, near Kilimanjaro and Kenia—the birds have a tendency to be slightly larger and darker. We have not been able to examine specimens from southern Somaliland itself, but the Tana river birds seem indistinguishable from the Nile race.

Count Zedlitz gives reasons for fixing the type-locality of E. rüppelli as "White Nile," rather than Shoa, which we accept.

# Prionops concinnata.

Prionops concinnata Sundev.; Sclater in Shelley's B. A. v. p. 483.

[B. coll.] 1 Gallabat Apl. Kas.; 5 Roseires Aug. Sept., 1 Disa Aug. Sen.; 1 Katta Jan., 1 Khor Gitti Jan., 1 Moyen Apl., 1 nr. Rumbek Jan. B.G.

[C. & L. coll.] 2 Kamisa Dec. Sen.

[Chr. coll.] 3 Yambio Mch., 4 Mt. Baginzi Mch. B.G.; 5 Yei Nov. L.E.

On the whole, we consider it best to keep this as a distinct species, and not as a subspecies of *P. cristata* as has been suggested by Neumann. We can find no difference between the Roseires and Bahr el Ghazal examples.

# Family SYLVIIDÆ.

Agrobates galactotes galactotes.

Agrobates galactotes galactotes (Temm.); Hartert, Vög. pal. Faun. p. 603.

Aedon galactodes Butler, Ibis, 1905, p. 336, 1908, p. 231.

[B. coll.] 1 Erkowit Mch. R.S.; 1 Gedaref Apl. Kas.; 5 Khartoum Apl. May.

[C. & L. coll.] 2 Kamisa Dec. Sen.

Agrobates galactotes minor.

Agrobates galactotes minor (Cab.); Hartert, Vög. pal. Faun. p. 606.

Aedon galactodes apud Butler, Ibis, 1909, p. 397.

- [B. coll.] 1 Khor Arbat May, 2 Erkowit Mch., 1 Jebel Okokreb Mch. R.S.; 1 Ein-el-Lueiga on the Rahad river May, B.N.
- [C. & L. coll.] 2 Sinkat Mch. R.S.; 2 Kamisa Dec., 1 Singa Dec. Sen.

There are undoubtedly two distinct races of the Rufous Warbler in the Sudan, the larger typical A. g. galactotes, which is a winter migrant only, and the smaller A. g. minor, a resident form in northern Abyssinia and Somaliland, and the Sudan westwards to Northern Nigeria and the Gold Coast hinterland.

From the latter locality Alexander described his Sylvia oliviæ, Bull. B. O. C. xxiii. 1908, p. 15, which is a synonym.

The measurements of the wings of the two forms are as follows:—

A. g. galactotes: 3 88, 90; \$ 85, 85, 85, 84, 84, 84, 84.

A. g. minor: & 83, 83, 82, 82, 82, 82, 82, 80, 80, 80, 78; \$78, 78, 79.

The measurements, as will be seen, are remarkably constant and afford an easy method of separation.

Mr. Butler did not distinguish between the two forms of the Rufous Warbler, but he found the smaller one breeding at Khor Arbat on 13 May.

#### Locustella luscinioides luscinioides.

Locustella luscinioides luscinioides (Savi); Hartert, Vög. pal. Faun. p. 548.

[B. coll.] 1 Khartoum Mch.

A single example of this species dated 15 March, 1908, is the first definite record of the occurrence of this species in the Sudan. Shelley states it is a resident in Egypt, whence there are three examples in the British Museum, but the present example is the most southerly record yet available.

# Acrocephalus arundinaceus arundinaceus.

Acrocephalus arundinaceus arundinaceus (Linn.); Hartert, Vög. pal. Faun. p. 556.

Acrocephalus turdoides Butler, Ibis, 1905, p. 334.

[B. coll.] 4 Khartoum Oct.

# Acrocephalus scirpaceus scirpaceus.

Turdus scirpaceus Hermann, Observ. Zool. 1804, p. 202: Alsace.

Acrocephatus streperus (Vieill.) et auct.; Butler, Ibis, 1905, p. 334, 1909, p. 395.

[B. coll.] 1 Gedaref May, Kas.; 13 Khartoum Mch. & Apl.

[C. & L. coll.] 1 Erkowit Apl. R.S.; 5 White Nile lat. 13<sup>3</sup>° N.-14<sup>3</sup>° N. Jan.; 1 near Lake No Feb. U.N.

Widely distributed in winter time (A. L. B.).

# Acrocephalus schænobænus.

Motacilla schænobænus Linn. Syst. Nat. 1758, p. 184: S. Sweden.

Acrocephalus schænobænus (Linn.); Hartert, Vög. pal. Faun. p. 566.

Acrocephalus phragmitis Butler, Ibis, 1905, p. 334, 1908, p. 231.

[B. coll.] 8 Mongalla Oct.

Acrocephalus agricola agricola.

Acrocephalus agricola agricola Jerdon; Hartert, Vög. pal. Faun. p. 564.

[C. & L. coll.] 1 White Nile lat.  $9\frac{1}{2}^{\circ}$  N. long.  $31^{\circ}$  E. Feb.

This little Warbler does not seem to have been noticed previously in Africa or Arabia, but as it breeds in the Crimea, south-east Russia and eastwards to the Himalaya, and winters in India, it is not unnatural to find it occasionally visiting the Nile valley in winter. It is very like A. bæticatus from south of the Zambesi, but is rather smaller and more rufous in coloration. In J. f. O. 1880, p. 212, Hartlaub described a bird collected at Lado by Emin under the name Acrocephalus albotorquatus. Subsequently he submitted the specimen to Seebohm, who identified it as a partial albino of the South African A. bæticatus. There can be little doubt in our minds that it is really A. agricola, especially as the wing is given as 55 mm., which is a good deal less than the usual measurement of A. bæticatus.

Since writing the above we have found in the British Museum three unidentified Warblers collected by Boyd Alexander, a female at Lake Chad on 11 March and a pair at Fort Archambault on the Shari river on 21 July. We cannot distinguish these birds from A. a. agricola. It therefore appears that a bird indistinguishable from A. a. agricola breeds in western Africa, and we must leave the explanation of the problem to the future.

# Acrocephalus palustris.

Acrocephalus palustris (Bechst.); Hartert, Vög. pal. Faun. p. 562.

Witherby (Ibis, 1901, p. 257) obtained a Marsh-Warbler at Shebesha, a few miles north of El Duem, White Nile Province, on 23 April, 1900, but there are no Sudanese examples in the British Museum.

This bird winters in tropical Africa as far south as Natal.

Acrocephalus stentoreus stentoreus.

Curruca stentorea Hemprich & Ehrenberg, Symb. Phys. Aves, 1833, fol. bb: Damietta, Egypt.

Acrocephalus stentorea stentorea (H. & E.); Hartert, Vög. pal. Faun. p. 559.

Dr. Hartert states that this bird was obtained by Brehm on the Blue Nile, 24 December, 1850. There are Egyptian but no Sudanese examples in the Museum collections.

# Heliolais erythroptera erythroptera.

Drymoica erythroptera Jardine, Contr. Orn. 1849, p. 15: West Africa.

Heliolais erythroptera (Jard.); Reichw. Vög. Afr. iii. p. 570.

Orthotomus erythropterus Butler, Ibis, 1909, p. 82.

[B. coll.] 1 Wau Mch. B.G.

[Chr. coll.] 1 Meridi Feb. B.G.

I shot a male at Kajo Kaji L.E. 27 Mch. 1915; it is now in the Gordon College Museum at Khartoum. A rare bird. (A. L. B.)

### Melocichla mentalis amauroura.

Argya amauroura Pelz. Verh. zool.-bot. Ges. Wien, xxxii. 1883, p. 503: Fadibek, Upper White Nile, E. of Nimule.

Melocichla mentalis Butler, Ibis, 1908, p. 230, 1909, p. 82.

[B. coll.] 5 near Chak Chak, 1 Tembura Mch. B.G.; 1 Bor May, Mon.; 1 Kajo Kaji, 2 Rejaf, Apl. L.E. [Chr. coll.] 1 Tembura, 1 Meridi Mch. B.G.

# The races of this bird appear to be-

- 1. M. m. mentalis (Fraser).
  West Africa from the Gold Coast to N. Angola.
- 2. M. m. orientalis Sharpe.

  Nyasaland and German East Africa north to
  Ukamba.
- 3. M. m. amauroura Pelz.

  Uganda, western British East Africa, White

  Nile, Bahr el Ghazal, and S. Abyssinia.

Of these M. m. amauroura seems to us a very poorly defined race. In quite fresh specimens the colour of the tail is undoubtedly darker than in West African examples, but when the plumage is at all worn or faded this distinction disappears. Neumann remarks (J. f. O. 1906, p. 264) that some of the birds from north of the Victoria Nyanza seem to partake of the characters of all three races. This is borne out also by the series before us with the exception that we have none resembling M. m. orientalis.

Of the two birds collected by Dr. Christy, the Tembura bird might be typical M. m. mentalis, and the Meridi bird M. m. amauroura, while some of the more worn specimens collected by Butler are considerably lighter than the average M. m. mentalis.

Another race, M. m. adamauæ, has been described by Reichenow (O. M. xviii. 1910, p. 173) from the interior of Cameroon. Of this we possess no examples and can give no opinion as to its validity. From Angola Bocage (Journ. Sci. Lisbon, viii. 1880, p. 56) described his Drymoica grandis. We have examined the series collected by Dr. Ansorge in that country and can find no distinction between them and M. m. mentalis.

# Cisticola natalensis malzacii. (Pl. X. figs. 3, 4.)

Drymoica malzacii Heuglin, SB. Akad. Wien, xix. 1856, p. 274: [White Nile between 7° & 9° N.E.] (nom. nud.); id. Ibis, 1869, p. 100 [first descript.].

Cisticola strangii apud Butler, Ibis, 1909, p. 82.

[B. coll.] 1 Chak Chak Mch., 1 Doleiba May, B.G.; 1 Mongalla; 1 Lado Feb., 1 Kajo Kaji Mch. L.E. [Chr. coll.] 1 Meridi Feb., 2 Wau July Aug. B.G.

# Cisticola natalensis inexpectata.

Cisticola natulensis inexpectata Neumann, J. f. O. 1906, p. 268: Abassi (=Awasa) Lake, S. Abyssinia.

B. coll. 2 Disa Apl. Sen.

[C. & L. coll.] 19 White Nile between Renk and the Bahr el Zeraf Jan. Feb.



1-2 Cisticola fugubris marginata æst. et hiems.

3-4 Cisticola natalensis malzacii æst. et hiems.

5 Cisticola erythrops erythrops.

6 Cisticola erythrops roseires.

7 Cisticola terrestris eximia.

8-11 Cisticola ruficeps scotoptera æst. et hjems

The birds from the Nile above the sudd and from Bahr el Ghazal match exactly one in the Museum from Gondokoro collected by G. Blaine, and this has been compared by Sclater with Heuglin's type of D. malzacii now in the Vienna Museum, which was courteously sent to him for examination some years ago. It is somewhat intermediate between C. n. inexpectata and C. n. strangei of West Africa, but until a general revision of the Grass-Warblers is carried out it may be allowed to stand.

The birds from the White Nile below Lake No and those from the Blue Nile are slightly paler and less reddish, and can be easily distinguished from West African birds. They agree very well with a topotype of *C. n. inexpectata* of Neumann collected near Lake Zwai by Zaphiro, except that they are slightly inferior in size, the wings of males in winter averaging 72 mm. against 75 mm. in the Abyssinian bird.

Both these subspecies have a marked seasonal change of dress (Pl. X. figs. 3, 4). The winter birds have backs strongly striped dusky and fulvous, and longer tails averaging 65 mm.; the summer birds have the edges of the feathers grey not fulvous, and the stripes are less defined; tail 55 mm.

# Cisticola lugubris marginata. (Pl. X. figs. 1, 2.)

Drymoica marginalis Heuglin, SB. Akad. Wien, xix. 1856, p. 274 [nom. nud.]: Bahr el Abiad between 6° and 9° N. lat., i. e. White Nile between Fashoda and Lado.

Drymoica marginata Heuglin, Ibis, 1869, p. 94, pl. i. fig. 1 [founded on above].

Cisticola marginalis Hartlaub, Orn. Centralb. 1881, p. 12; id. Abhandl. nat. Ver. Bremen, vii. 1881, p. 89; Lado (Emin) [apparently the same species as Heuglin's redescribed as a new species but under the same name]; Butler, Ibis, 1905, p. 333, 1908, p. 229, 1909, p. 82.

Cisticola blanfordi Hartlaub, Abhandl. nat. Ver. Bremen, viii. Apr. 1883, p. 220 [nom. nov. pro C. marginalis Hartl.]. Cisticola hartlaubi Sharpe, Cat. Birds B. M. vii. July 1883, p. 243 [nom. nov. pro C. marginalis Hartl.].

[B. coll.] 2 Fashoda Jan. Feb., 2 Malakal May, U.N.; 5 Mongalla, 3 Gigging summer, 1 Kenisa Jan. Mon.; 1 Chak Chak Feb., 1 Wau Apl. B.G.

[C. & L. coll.] 27 White Nile from Renk to Lake No, Jan.-Mch. U.N.

This unfortunate bird has suffered severely at the hands of ornithologists, as can be seen by the synonymy. Hartlaub described it a second time believing it to be new, but unfortunately gave it the same name as that already assigned to it by Heuglin, and subsequently both he and Sharpe finding out the mistake each again christened it afresh.

We feel that the complete elucidation of the Cisticolas must be reserved until it is possible to compare all the types in the European museums, and that the matter must be dealt with as a whole. We are therefore merely attempting here to give the correct name to the Sudanese birds.

Sclater was able before the war, through the courtesy of the authorities of the Vienna Museum, to examine Heuglin's types of *C. marginalis* or *C. marginata* as he afterwards called it. He found them undoubtedly identical with examples taken by Hawker at Kaka on the White Nile.

This bird has a very distinct seasonal change; those taken at Malakal, Mongalla, and Gigging are in summer (rainy season) dress (Pl. X. fig. 1). The crown is a dusky brown without or with very faint indications of stripes, the back is bluish-leaden colour heavily streaked with black, the tail is shorter (averaging 48 mm. against 58 mm. of birds in winter dress) and is dusky brown without any rufous. The individual feathers are also distinctly wider. The winter birds, on the other hand (Pl. X. fig. 2), have a rufous-brown crown streaked with black. The ground-colour of the back fulvous not leaden, and rich rufous on either side of the black central area along the shafts of the tail-feathers. The wings are similar in both dresses, except that the inner secondaries are margined with rufous in summer instead of dusky; the tail is much longer, as can be seen in the Plate.

We have little doubt that Cisticola slatini recently described by Wettstein (Anz. Akad. Wien, 1916, no. 13,

pp. 131-5), from Tonga in the Upper Nile Province, is nothing but C. l. marginata in summer dress.

### Cisticola cheniana simplex.

Drymæca simplex Heuglin, Ibis, 1869, p. 105: Bahr el Djebel, i. e. Upper White Nile between Lado and Lake No.

Cisticola ladoensis Hartlaub, Abhandl. nat. Ver. Bremen, viii. 1882, p. 189: Lado.

[B. coll.] 11 Mongalla May-Sept., 1 Bor May, 1 Kenisa Jan. Mon.; 1 Rejaf Feb. L.E.

[Chr. coll.] 1 Yei Nov. L.E.

These Grass-Warblers from the sudd district of the upper White Nile are undoubtedly identical with a bird collected by Emin at Lado, which we may regard as a co-type of Hartlaub's species. It belongs to the group widely spread over eastern and southern Africa usually placed under the specific name subruficapilla or cheniana, but we believe that the true C. subruficapilla of western Cape Colony is distinct specifically and prefer to use cheniana.

Neumann (J. f. O, 1906, p. 267), who has examined the types of Heuglin's *D. simplex*, believes that it is identical with *C. ladoensis* Hartl., and that it was founded on a young female, which accounts for the discrepancy in the wing-measurement, which is given by Heuglin as 1 inch 11 lines, which is approximately 50 mm., the measurement given by Reichenow (Vög. Afr. iii. p. 547). Males in the Butler collection average 65 mm., females 55 mm.

We suspect that Cisticola subruficapilia borea Mearns, Smiths. Misc. Coll. lvi. No. 25, 1911, p. 3: Rhino Camp, Lado Enclave, is a synonym.

#### Cisticola aridula.

Cisticola aridula Witherby, Bull. B. O. C. xi. 1900, p. 13: Gerazi, 60 miles S. of Khartoum.

[C. & L. coll.] 6 from  $13\frac{3}{4}^{\circ}$  to  $15^{\circ}$  N. lat. on White Nile Jan. W.N.

Up to the present time the type of Witherby's C. aridula has remained unique, with the exception of an example col-

lected at Shendi by Rothschild and Wollaston, so that several writers have considered it to be an abnormal variation. Messrs. Chapman and Lynes have, however, collected a good series of this truly desert form on the banks of the White Nile from about 50 to 100 miles south of Khartoum, and there can be no doubt of the validity and distinctness of the form.

We believe that Cisticola deserticolor Wettstein (Anz. Akad. Wien, 1916, no. 13, pp. 131-135), from 20 kilometres N. of El Obeid, will prove to be identical.

As the distribution of this and C.c. uropygialis appears to overlap along the White Nile valley and we have not come across any intermediate form, we prefer at present to regard C. aridula as a distinct species.

# Cisticola ruficeps ruficeps.

Maturus ruficeps Cretzschmar in Rüpp. Atlas, 1826, p. 54, pl. 36 A: Kordofan.

[B. coll.] - 1 Jebel Melbis Apl. Kor.

This bird is mentioned by Butler (Ibis, 1905, p. 333) as being much paler than the forms from the Nile valley, and obviously represents the true *M. ruficeps* of Cretzschmar. There is one other example in the British Museum labelled "Nubia? Dr. Kotschy?"

Cisticola ruficeps scotoptera. (Pl. X. figs 8-11.)

Drymæca scotoptera Sundevall, Œfv. Ak. Förh. 1850, p. 129: Sennar.

? Drymæca cinerascens Heuglin, J. f. O. 1867, p. 296: Sennar.

Cisticola floweri Hartert, Bull. B. O. C. xxvii. 1910, p. 12: Sennar.

Cisticola ruficeps (part) Butler, Ibis, 1905, p. 333, 1908, p. 229, 1909, p. 82.

- [B. coll.] 2 Roseires Apl. Sen.; 1 Taufikia Apl., 1 Fashoda Jan. U.N.; 1 Chak Chak Feb., 1 Moyen May, B.G.; 4 Mongalla summer.
- [C. & L. coll.] 3 Singa, 2 Kamisa Dec. Sen.; 14 White Nile from Jebelein to Bahr el Zeraf Jan. Feb.

We find that birds from the upper Nile valley and Sennar are quite distinct from those from Kordofan. They are much darker and more richly coloured and much more heavily striped. For the Kordofan bird we retain the type name; the Sennar and upper Nile bird we refer to Sundevall's D. scotoptera. We are of opinion that C. sudanica Madarász, Ann. Mus. Nat. Hung. ix. 1911, p. 340: Dinder river, is a synonym.

There is a very distinct seasonal plumage change in these birds, and our series shows this very clearly. The winter birds (Pl. X. fig. 10) have the back boldly striped with black and yellowish and the head a darker rufous obscurely streaked with dusky. The summer birds have the back plain greyish brown (Pl. X. figs. 8, 9), with very faint traces of the darker central stripes to the feathers; the head is much paler rufous, hardly contrasting with the back, and is without streaks, the tail is much shorter (about 45 against 40 mm.), and the feathers rather broader. The April birds (Pl. X. fig. 11) show the intermediate stage very clearly.

The wings of the males measure 53-60 mm., average 56 mm., those of the females 49-52 mm. We are inclined to identify with the summer birds *Drymæca cinerascens* Heuglin, but comparison with the type is desirable.

We have also examined the types of *C. floweri* (Pl. X. fig. 9), now in the Tring Museum, and have satisfied ourselves that this is *C. r. scotoptera* in late summer plumage. The two examples were collected on 28 and 30 July, and the new winter tails are in the case of one bird just sprouting, in the case of the other two-thirds grown. The white outer web to the outer tail-feathers, noted by Hartert as so characteristic a feature, can be easily matched in winter birds, of which we have before us a large series.

Cisticola cisticola uropygialis.

Drymoica uropygialis Fraser, Proc. Zool. Soc. 1843, p. 17: Accra, Gold Coast.

Cisticola cisticola apud Butler, Ibis, 1905, p. 332.

- [B. coll.] 1 Shendi Feb. Ber.; 7 Khartoum Apl. July; 1 Kawa Nov. W.N.; 1 Renk May, U.N.
- [C. & L. coll.] 12 White Nile between Renk and the Bahr el Zeraf Jan.-Mch. U.N.

We find these birds identical with the West African form of *C. cisticola*, which again is very close to the typical form from southern Europe. There are other examples in the Museum from Lado (*Emin*) and from the Lake Chad region (*Alexander*), as well as from other localities in West Africa and possibly Uganda, but we find nothing similar from Abyssinia. The seasonal plumage change is not very marked, but the summer birds have the head a dull brown without indication of the striping so characteristic of the winter birds.

Cisticola terrestris eximia. (Pl. X. fig. 7.)

Drymæca exima Heuglin, Ibis, 1869, p. 106, pl. iii. fig. 1: Upper Gazelle river (i. e. Bahr el Ghazal).

[C. & L. coll.] 1 Bahr el Zeraf river Feb. U.N.

This bird and another collected by Mr. W. P. Lowe 50 miles south of Gondokoro, 1 March 1913, when with Capt. Cozens, we believe must be identified with the bird described by Heuglin, which is now in the Berlin Museum and inaccessible to us. It is a remarkable bird, not unlike some strongly marked Natal specimens of C. t. terrestris, but more richly coloured—the back blacker and the rump redder. The nape, which is quite unstriped, is a dull reddish brown, contrasting somewhat with the brighter red of the rump. We have only found one bird in the Museum which is at all like it. It is one collected at Riru in Northern Nigeria by José Lopez, 4 January, 1912, and presented to the Museum by Capt. Brocklebank. It is slightly larger, the nape and rump are the same bright rufous which is so extended that the black striping of the back is much reduced.

The wings of the Sudan specimens measure, 3 47 mm., 2 44 mm., that of the Nigerian bird, sexed a male, 51 mm,

Cisticola troglodytes troglodytes.

Drymoica troglodytes Antinori, Cat. descr. Uccelli, Mch. 1864, p. 38: Djur, Bahr el Ghazal.

Cisticola ferruginea apud Butler, Ibis, 1908, p. 230, 1909, p. 82.

- [B. coll.] 2 Chak Chak Feb. B.G.; 1 Mongalla Feb., 2 Kenisa summer, Mon.
- [C. & L. coll.] 2 White Nile, 9½° N. 31° E. (near Lake No), Feb. U.N.

# Cisticola troglodytes ferruginea.

Cisticola ferruginea Heuglin, SB. Akad. Wien, xix. 1856, p. 273: Rahad river, Blue Nile [nom. nud.]; id. J. f. O. 1864, p. 259; Butler, Ibis, 1905, p. 130.

[B. coll.] 4 Roseires Apl. July Aug., 1 Jebel Maba Apl., 1 Fazogli May, Sen.

This rufous-coloured Grass-Warbler is very distinct specifically, but we find that the birds from the upper Blue Nile are subspecifically distinct from those of the upper White Nile and its tributaries. The birds from the first-named district are very much paler on the lower surface, there is a light wash of ferrugineous across the chest and along the flanks leaving the throat and middle of the abdomen almost pure white; they are also larger, wing averaging 352, 247 mm.

Birds from the upper White Nile, as well as examples from the upper Welle river, collected by Boyd Alexander, are much more richly suffused with ferruginous below the throat and abdomen, never getting so white as the Blue Nile bird. They are also distinctly smaller, wing of 3 averaging 47, \$\gamma\$ 43 mm.

As will be seen from the references, Antinori's bird was described from the Bahr el Ghazal and Heuglin's from the Blue Nile, but we are not quite satisfied as to which of the descriptions is the earliest; as the birds are distinct this is a matter of no great moment.

#### Cisticola butleri.

Cisticola butleri O.-Grant, Bull. B. O. C. xxi. 1907, p. 17: Chak Chak; Butler, Ibis, 1905, p. 229.

[B. coll.] 1 Chak Chak Feb. B.G. [Type of the species.] The type of this species seems unique, there is nothing else quite like it in the Museum. It has a curious long slender bill, and is probably related to C. sylvia or C. erythrops.

#### Cisticola wellsi.

Cisticola wellsi O.-Grant, Bull. B. O. C. xxi. 1907, p. 17: Bahr el Ghazal; Butler, Ibis, 1905, p. 229.

[B. coll.] 1 \( \text{Pongo river Mch. B.G. [type of species]} \); 1 \( \text{V Kajo Kaji, L.E.} \)

Both the known examples of this form are females. The males are probably a good deal bigger, but until a larger series are available it is difficult to say more about it. It resembles generally C. t. troglodytes, but has a very much larger and stronger bill.

### Cisticola sp.

[Chr. coll.] 1 & Yambio Mch., 1 & Mt. Baginzi Mch. B.G.

We were inclined at first to regard these birds as the males of *C. wellsi*, but they are somewhat different. The Yambio bird, wing 64 mm., has the back a rich rufous-brown of a more chestnut tinge than *C. wellsi*, and a very much larger bill (13 mm. against 11); the Mt. Baginzi bird is dusky rather than rufous-brown, but resembles the other specimen in dimensions and form. It is very like a series of birds collected by Alexander on the Welle river which seem to come near *C. emini* and *C. rufopileata*.

# Cisticola petrophila.

Cisticola petrophila Alexander, Bull. B. O. C. xix. 1907, p. 104: Pettu, N. Nigeria.

Cisticola cinerascens (Heugl.); Butler, Ibis, 1908, p. 230. [B. coll.] 1 Doleiba Jan. B.G.; 1 Kajo Kaji, L.E. We believe that the bird from Kajo Kaji and the one from Doleiba, which appears to be a juvenile, are identical with C. petrophila Alex., a form which should be regarded in our view as a subspecies of the West African C. rufopileata. There is a good series of this form in the British Museum from Northern Nigeria and the Welle river, collected by Alexander; a single bird from Tingasi in the Niam-Niam country, collected by Emin, and another labelled Kibusi, Lango, north of Victoria Nile, obtained by G. Blaine.

#### Cisticola brachyptera.

Drymæca brachyptera Sharpe, Ibis, 1870, p. 476, pl. xxiv. fig. 1: Volta river, Gold Coast.

[B. coll.] ? Chak Chak Mch. B.G.

[C. & L. coll.] & White Nile lat. 9\frac{1}{2}\circ N. long. 31\circ E. (nr. Lake No), U.N.

We cannot distinguish these birds from C. brachyptera described by Sharpe, but subsequently (Cat. Birds, vii. p. 225) identified with C. rufa (Fraser). The types of both species are in the Museum, and we believe that they are quite distinct. The two types of C. brachyptera are unsexed, but the wings measure 48 and 42 mm. respectively, and they are probably male and female. The Sudan birds measure, 350, 2 44 mm. This species is distinguished by its small size, the head and back brown without any rufous, a slight wash of rufous on the wings, and by the dull ashy (not white) tips to the tail-feathers. It extends to southern Abyssinia and south to Gaboon and Portuguese East Africa, and there are probably several races, but the Sudanese birds appear to be indistinguishable from the West African typical race. The winter birds show distinct but not very heavy stripes on the back, the summer birds are quite plain.

The type of Cisticola hypoxantha Hartland (P. Z. S. 1880, p. 624: Magungo, Nile Province of Uganda Protectorate), now at Tring, has been examined by us, and is obviously identical with the form of C. brachyptera occurring in the Sudan. It is a young bird with the characteristic bright

yellow wash on the underparts. There is another example, an adult male from Fadjulli in the same district, collected in May by Emin Pasha, also in the Tring Museum.

C. rufa is found in West Africa from the Welle river to the Cameroon, and perhaps Angola, is a reddish bird as its name implies, and appears to be always without striping on the back.

Cisticola erythrops erythrops. (Pl. X. fig. 5.)

Drymæca erythrops Hartlaub, Orn. W.-Afr. 1857, p. 58: Calabar, W. Africa.

[B. coll.] 1 S. of Rejaf, L.E. [Chr. coll.] 1 Meridi Jan. B.G.

Cisticola erythrops roseires, subsp. nov. (Pl. X. fig. 6.)

[B. coll.] 3 Roseires Apl. Aug., 1 Disa Apl. Sen.

We have examined the series of Cisticola erythrops in the Museum. It is a remarkably distinct form and can hardly be confused with any other. No races appear to have been recognized, and we believe we can distinguish the following:—

C. E. ERYTHROPS (Hartl.).

A richly coloured race (Pl. X. fig. 5) with the back of slaty shade becoming more rufous on the head; below very rufous with the white on the throat and abdomen much reduced; no apparent seasonal change. Wing, 358-62, average 60 mm.; \$\chi\$53-57, average 55 mm.

Distribution. West Africa: Cameroon to the Gold Coast, and eastwards to Ruwenzori and to the Lado district.

C. E. ZWAIENSIS, subsp. n.

Resembling C. e. erythrops, but rather larger and paler; the underside is very rufescent with only a small trace of white on the throat; a distinct seasonal change: birds dated December and February have a distinctly rufous head and nape; birds dated June have only the forehead rufous, the crown and nape washed with olive. Wing, 3 62-65, \$\frac{9}{55-57}\$ mm.

Type: a male collected by Sir A. E. Pease at Lake Zwai 5/ii./01. B.M. reg. no. 1902/1/20/106.

Distribution. Southern Abyssinia. There are two other examples in winter plumage from Lake Zwai, collected by Sir A. Pease and Zaphiro; and three others from Konta and Kullo, also in southern Abyssinia, collected by Zaphiro.

C. E. ROSEIRES, subsp. n.

Resembling C. e. zwaiensis, but very much smaller and a good deal paler (Pl. X. fig. 6). This form also has a similar seasonal change. The three April birds have rufous heads and napes, the August bird has only the forehead rufous shading over the crown into the dull brown of the back; below much paler than the other two forms, almost white. Wing-measurements:  $\mathcal{E}$  (as sexed) 51 and 53; of  $\mathcal{P}$  (as sexed) 51, 53 mm.

Type: 3 collected by A. L. Butler at Roseires, 19/iv./11. B.M. reg. no. 1915/12/24/1058.

Distribution. Only known from the four Sennar birds.

C. E. PYRRHOPS.

Melocichla pyrrhops Cabanis, J. f. O. 1875, p. 236: Tschintschoscho, Gaboon.

Birds from the Gaboon, Nyasaland, and the Zambesi valley have a pronounced olive wash on the back, and appear to be separable. There are four females only in the Museum; their wings measure 55-58 mm.

Spiloptila clamans.

Malurus clamans Temminck, Pl. Col. livr. 78, 1828, pl. 466. fig. 2: Nubia.

Spiloptila clamans Butler, Ibis, 1905, p. 332.

[B. coll.] 1 Wadi Ben Naga Apl., 1 Musid Apl. B.N.; 3 Khartoum Feb. Apl. Nov., 2 Omdurman Mch. Apl. Kh.

[C. & L. coll.] 2 Omdurman Jan. Mch. Kh.; 4 White Nile lat. 15° N. Jan. W.N.

SER. X .- VOL. VI.

#### Schenicola apicalis.

Catriscus apicalis Cabanis, Mus. Hein. i. 1850, p. 43, note: Kaffirland (i.e., Natal).

Schenicola apicalis (Cab.); Reichw. V. A. iii. p. 577.

Heuglin (Orn. N.O.-Afr. i. p. 273) obtained a single example of this Reed-Warbler on the Gazelle river. He states that it differs from the typical South African bird in being smaller and in having the rectrices broader and darker coloured. Should these differences be well founded it may be called S. apicalis alexinæ Heugl. (J. f. O. 1863, p. 323).

It was also obtained by Emin near Wadelai and at various places in Uganda.

There are no Sudanese examples in the British Museum.

#### Bradypterus abyssinicus.

Lusciniola abyssinica Blundell & Lovat, Bull. B. O. C. x. 1899, p. xix: Chercher, Abyssinia.

Bradypterus abyssinicus Reichw. V. A. iii. p. 578.

[C. & L. coll.] 6 3 ? Lake No and  $9\frac{1}{2}$ ° N., 30° 40′ E., Feb. 24–Mch. 1, U.N.

These birds are not distinguishable from the example collected by Blundell and Lovat, which, up to now, has remained unique. It is only subspecifically distinct in our opinion from B. bradypterus of South Africa, which is larger and somewhat lighter in colour; while there are a few examples of the same group from East Africa which appear to be intermediate.

The soft parts are marked as follows: Iris very dark brown; bill, upper mandible very dark brown, lower pale yellowish white, greyish at tip; feet flesh-colour.

The wings of the males measure 52-54, those of the females 50-52 mm. Two East African males measure 57 mm., and South African birds, sexing doubtful, measure 58-63 mm.

This is an addition to the Sudanese fauna, and does not appear to have been previously recorded from the Nile valley.

#### Calamocichla ansorgei nilotica.

Calamocichla ansorgei nilotica Neumann, Nov. Zool. xv. 1908, p. 246: Wadelai.

[B. coll.] 2 juv. Mongalla Oct. Mon.

[C. & L. coll.] 12 3, 10 \, 2 \, 0, 1 \, 2 \, juv., near Lake No Feb. 9-Mch. 1, U.N.

We have followed Neumann in his recent monograph of this group and have retained the name *nilotica*, though the type species *C. a. ansorgei* is from Angola and only known from one example.

The fine series collected by Lynes and Lowe exactly match the specimen collected by Emin at Wadelai.

The young birds, one from Mongalla and one from Lake No, are ochraceous rather than ashy, especially below.

The colour of the soft parts is as follows: Iris sienna; upper mandible smoky brown, lower yellowish brown; legs sepia, sometimes with a greenish tinge; mouth-lining pale yellow.

Measurements of the wings of five males, 72-78 mm.; of four females, 74-76 mm.

# Calamocichla leptorhyncha nuerensis.

Calamocichla leptorhyncha nuerensis Lynes, Bull. B. O. C. xxxiii. 1914, p. 130: Nuer country, Upper White Nile.

[B. coll.] 1 ♀ juv. Shamba Feb. Mon.

[C. & L. coll.] 6 &, 2 \, 2 \, 7 \, 0, 1 \, 2 \, juv., near Lake No Feb.-Mch. 4, U.N.

Capt. Lynes has given an ample description of this interesting form, to which we have nothing to add.

# Hippolais pallida pallida.

Hippolais pallida pallida (Hempr. & Ehr.); Hartert, Vög. pal. Faun. p. 574.

Hypolais pallida Butler, Ibis, 1905, p. 334, 1909, pp. 82, 395.

[B. coll.] 1 Talgwareb Apl. 29, R.S.; 1 Kamlin Mch. B.N.; 10 Khartoum Oct. 17, Nov. Feb. Mch. Apl. 21, Kh.; 1 Jebel Ahmed Aga Jan. U.N.

[C. & L. coll.] 1 Kamisa, 1 Singa Dec. Sen.; 1 Melut Jan., 1 nr. Lake No Mch., 1 9½° N., 30° 40′ E., Feb. W.N.

A common winter bird in north-east Africa, breeding in south-eastern Europe and western Asia.

### Hippolais languida.

Hippolais languida (Hempr. & Ehr.); Hartert, Vög. pal. Faun. p. 573.

[B. coll.] 1 & Khartoum, 24 Aug.

This species has been obtained in Eritrea and the Aden Protectorate, also in August, and possibly breeds in northeast Africa as well as in western and central Asia. It does not appear to have been previously recorded from the Sudan.

#### Sylvia nisoria nisoria.

Sylvia nisoria nisoria (Bechst.); Hartert, Vög. pal. Faun. p. 578; Butler, Ibis, 1909, p. 396.

- [B. coll.] 1 Port Sudan Apl. 5, Khor Arbat May 5, R.S.
- [C. & L. coll.] 3 Sinkat Mch. R.S.; 2 White Nile lat. 12° N. Mch. W.N.

Scarce on the Nile, but extremely plentiful on spring migration along the Red Sea coast (A. L. B.).

# Sylvia communis communis.

Sylvia communis communis Latham; Hartert, Vög. pal. Faun. p. 586.

Sylvia cinerea Bechst.; Butler, Ibis, 1909, p. 397.

- [B. coll.] 1 Port Sudan, Apl. 30, R.S.; 1 Disa Apl. 15, Sen.
- [C. & L. coll.] I Sinkat Mch. 24, 1 Erkowit Mch. 31, R.S.; 1 Kamisa Dec. Sen.

These Whitethroats seem to be all referable to the European typical race, though there is no reason why the eastern race S. c. icterops should not occur. Most of

the Arabian and Somaliland examples in the British Museum appear to belong to the latter form.

Scarce in winter at Khartoum as compared with the

Lesser Whitethroat (A. L. B.).

### Sylvia simplex.

Sylvia simplex Latham; B. O. U. List Bt. Bds. p. 66.

Sylvia borin borin (Bodd.); Hartert, Vög. pal. Faun. p. 582.

Sylvia hortensis Bechst.; Butler, Ibis, 1905, p. 335, 1908, p. 231, 1909, p. 396.

[B. coll.] 2 Khor Arbat May 4, R.S.: 3 Roseires Sept. 13-15, Sen.; 1 Khartoum Oct. 15.

The Garden-Warbler is common on migration, especially in spring; it winters farther south.

### Sylvia rüppelli.

Sylvia ruppelli Temm.; Hartert, Vög. pal. Faun. p. 592; Butler, Ibis, 1905, p. 335.

[B. coll.] 2 Shendi Mch. 2, Ber.; 3 Fatasha, W. of Omdurman, Nov., 1 thirty miles west of Omdurman Jan. Kh.

Three of the birds are sexed females, and are without the characteristic black cap, but show slight traces of black feathers coming in on the crown. They are probably young birds.

# Sylvia hortensis hortensis.

Sylvia hortensis hortensis (Gmel.); Hartert, Vög. pal. Faun. p. 580.

Sylvia orphea auct.

[B. coll.] 1 Shendi Mch. 1, Ber.

# Sylvia hortensis crassirostris.

Sylvia hortensis crassirostris Cretzschm.; Hartert, Vög. pal. Faun. p. 581.

[B. coll.] 1 Erkowit Apl. 3, 1 Gebeit Mch. 21, R.S. [C. & L. coll.] 2 Sinkat Mch. 19, R.S.; 3 Kamisa Dec. Sen.

The eastern race of the Orphean Warbler is undoubtedly the prevailing one in the Sudan. As this is the form breeding in south-western Europe and western Asia it is not surprising, but the bird from Shendi has the short bill of the western race and is rather dusky below, and we are inclined to identify it with the western typical form.

#### Sylvia curruca curruca.

Sylvia curruca curruca (Linn.); Hartert, Vög. pal. Faun. p. 588; Butler, Ibis, 1905, p. 336, 1908, p. 231, 1909, p. 397.

- [B. coll.] 2 Erkowit Mch., 1 Port Sudan May 2, Khor Arbat May 2, R.S.; 3 Khartoum Feb. Apl., 2 Fatasha Nov. 3, Kh.
- [C. & L. coll.] 1 Sinkat Mch. R.S.; 1 Singa Dec., 3 Kamisa Dec. Sen.; 1 Hassania Island Jan. W.N.

Widely distributed in winter. Perhaps the most abundant of the migratory Warblers (A. L. B.).

#### Sylvia nana nana.

Sylvia nana nana (Hempr. & Ehr.); Hartert, Vog. pal. Faun. p. 590.

[C. & L. coll.] 2 (3 9) Port Sudan Dec. 5, RS.

The label gives: "Iris brilliant chrome-yellow, legs bright straw-yellow. Two together in a tiny mimosa bush in the desert."

This little Warbler does not appear to have been previously met with in the Sudan, but it is known to winter in Arabia and on the Somali coast, and it is not surprising to find it near Port Sudan.

# Sylvia mystacea.

Sylvia mystacea Ménétr.; Hartert, Vög. pal. Faun. p. 595. [C. & L. coll.] 2 Sinkat Mch., 3 Port Sudan Dec. R.S.

Two of the Port Sudan birds have the forehead yellowish, contrasting strongly with the dull brown crown and back; in the third example this colour has almost disappeared and it resembles a bird from Shendi in the Museum identified by Messrs. N. C. Rothschild and Wollaston as S. momus. The crown is rather more ashy than the back, but is not black as in the two examples from Sinkat collected in March. All the others have the characteristic vinous flush on the underside.

#### Sylvia atricapilla atricapilla.

Sylvia a. atricapilla (Linn.); Hartert, Vög. pal. Faun. p. 583; Butler, Ibis, 1905, p. 335, 1909, p. 396.

- [B. coll.] 1 Khor Arbat May 2, R.S.; 4 Khartoum Oct. Dec.
- [C. & L. coll.] 1 Port Sudan Dec., 2 Erkowit Apl. 4, 6, R.S.

Very common on the Red Sea coast during the spring migration, widely distributed in winter from Khartoum to Lado. It is not rare in winter on the scrubby desert west of Omdurman and along the Nile north of Khartoum (A. L. B.).

#### Sylvia melanocephala momus.

Sylvia melanocephala momus (H. & E.); Hartert, Vög. pal. Faun. p. 594.

Heuglin (Orn. N.O.-Afr. i. p. 303) states that he met with this bird on migration in the Bayuda desert, Dongola Province. He named it Sylvia melanocephala minor, which is identified by Hartert with S. m. momus. It was also procured by Messrs. N. C. Rothschild and Wollaston at Shendi (Ibis, 1902, p. 17).

There are no Sudanese examples in the British Museum.

# Phylloscopus trochilus eversmanni.

Phylloscopus trochilus eversmanni (Bonap.); Hartert, Vög. pal. Faun. p. 509.

Phylloscopus trochilus apud Butler, Ibis, 1908, p. 231.

[B. coll.] 12 Khartoum Mch. Apl. Oct.; 1 Roseires Apl. Sen.

We are inclined to regard all the Willow-Wrens collected by Butler as belonging to the slightly greyer eastern race. Phylloscopus trochilus trochilus.

Phylloscopus trochilus trochilus (Linn.); Hartert, Vög. pal. Faun. i. p. 507.

[Chr. coll.] 1 Yambio, Mch. B.G.

A single example of the Willow-Wren collected by Dr. Christy in the Bahr el Ghazal appears to belong to the typical western race.

### Phylloscopus bonelli orientalis.

Phylloscopus bonelli orientalis (Brehm); Hartert, Vög. pal. Faun. p. 514.

[C. & L. coll.] 5 Sinkat Mch. R.S.; 1 Sennar Jan.; 1 Korti Mch. W.N.; 1 Tonga Feb. U.N.

The Bonelli Warblers collected by Messrs. Chapman and Lynes undoubtedly belong to the eastern race. There appear to be no Sudanese examples in the Museum collections though there are a good number from Egypt. It is not represented in the Butler collection, though he informs us he obtained it at Khartoum.

### Phylloscopus collybita abietina.

Phylloscopus collybita abietma (Nilsson); Hartert, Vög. pal. Faun. p. 503.

*Phylloscopus rufus* apud Butler, 1bis, 1905, p. 335, 1908, p. 231.

- [B. coll.] 6 Khartoum Apl. & Nov.; 1 Kawa Nov. W.N.
- [C. & L. coll.] 1 Kamisa Dec. Sen.; 2 White Nile 15° N. lat. Jan., 1 9½° N. lat. Feb.

All these Chiffchaffs appear to belong to the larger and paler Scandinavian race.

Widely distributed in winter (A. L. B.).

# Apalis rufifrons rufifrons.

Prinia rufifrons Rüppell, N. Wirbelth. 1835, p. 110, pl. 41: Abyssinian coastlands.

Apalis rufifrons (Rüpp.); Reichw. V. A. iii. p. 600.

- [B. coll.] 1 Erkowit Mch., 1 Erba Mch. R.S.; 2 Fatasha Feb. Kh.
- [C. & L. coll.] 1 Port Sudan Dec., 5 Sinkat Mch., 2 Erkowit Apl. R.S.

There is also an example from Habissa Wells, Kordofan, collected by Capt. Dunn, in the Museum. A. r. smithi [Dryodromas smithi Sharpe, Bull. B. O. C. iv. 1895, p. 29: Somaliland], though not recognized by Reichenow, seems to form a distinct subspecies distinguished by its rufous head, while in the present form that colour is confined to the forehead.

#### Drymocichla incana.

Drymocichla incana Hartlaub, P. Z. S. 1880, p. 626, pl. 60: Magungo, Albert Nyanza; Reichw. V. A. iii. p. 613.

[B. coll.] 1 Kajo Kaji, Mch. L.E. [Chr. coll.] 2 Meridi Jan. Feb. B.G.

Rare; only met with at one spot at Kajo Kaji (A. L. B.).

# Phyllolais pulchella.

Malurus pulchellus Cretzschmar, Atlas, 1826, p. 53, pl. 35: Kordofan.

Apalis pulchella Reichw. V. A. iii. p. 610. Phyllolais pulchella Butler, Ibis, 1905, p. 332.

- [B. coll.] 3 Roseires July, Aug. Sen.; 1 Taufikia Mch., 1 Bahr el Zeraf June, U.N.; 3 Mongalla, 1 Sheik Tombé Jan. Mon.
- [C. & L. coll.] 6 Kamisa Dec., 1 nr. Senga Dec. Sen.; 2 Jebel Ahmed Aga Jan., 1 nr. Renk Jan., 1 Tonga Feb., 2 nr. Lake No Feb. U.N.

# Sylvietta brachyura dilutior.

Syviella carnapi dilutior Reichw., vide infra.

[B. coll.] 3 Mongalia. [Chr. coll.] 1 Meridi Feb. B.G. Sylvietta brachyura nilotica.

Sylvietta brachyura nilotica Neumann, vide infra. Sylviella brachyura apud Butler, Ibis, 1905, p. 331, 1908, p. 228, 1909, p. 82.

- [B. coll.] 1 Erkowit Mch. R.S.; 1 Doka May, Kas.; 6 Roseires Apl. July, Aug. Sen.; 1 Taufikia Feb. U.N.; 1 Wau Apl., 1 Gamaiza Apl. B.G.
- [C. & L. coll.] 2 Sinkat Mch., 1 Erkowit Apl. R.S.; 6 Kamisa Dec. Sen.: 1 Jebel Ahmed Aga Jan., 1 Tonga Mch., 2 nr. Lake No Feb. U.N.

In naming these birds we found it necessary to examine all the species of Sylvietta with rufous undersides. We came in the main to the same conclusion as Zedlitz in his valuable paper on the genus, J. f. O. 1916, pp. 93-100, that there are three distinct groups.

The first of these, the "rufescens" group, is of large size, with a large bill, a dark streak through the eye, and a whitish eyebrow. Underside all one colour. Confined to South Africa.

The second group is the "whytii-jacksoni" group, of smaller size, with no dark eye-streak, and the eyebrow and cheeks strongly rufous. Underside all one colour, sometimes slightly paler in the centre of the abdomen. East and Central Africa.

The third group is the "brachyura" group, of size similar to the last, and in some cases very close to it, but always with a dark or grey eye-streak, and with a noticeable white patch in the centre of the belly; in some cases on the throat as well. N.W., Central, W., and N.E. Africa.

# I. "Rufescens" group.

# 1. Sylvietta Rufescens Rufescens.

Dicœum rufescens Vieill. Nouv. Dict. ix. 1817, p. 407: Oliphant river, Cape Colony (ex Levaillant).

Vieillot founded his Dicaum rufescens on Levaillant's plate (Ois. d'Afr. iii. pl. 135).

Levaillant figured this bird from specimens obtained at

the "Elephant's River," i. e., Oliphant River, western Cape Colony, and therefore this name must refer to the western and paler race. Sylviella flecki Reichw. O. M. 1900, p. 22, from south of Lake Ngami, is therefore a synonym. This race is characterized by its strong beak, plainly marked dark streak through the eye, and whitish superciliary stripe; the underside is pale rufous. Wing 58-62 mm. It extends from western Cape Colony through S.W. Africa, Namaqualand and Bechuanaland, probably to the western Transvaal.

For the other and richer coloured race we propose the name—

# 2. SYLVIETTA RUFESCENS TRANSVAALENSIS, SUBSP. nov.

A race very similar to S. r. rufescens but more richly coloured, with a more rufous underside. Slightly larger, wing 60-65 mm. Type, a specimen collected at Rustenberg, 6 June 1878, by W. Lucas; no sex given. B.M. reg. no. 95/5/1/1053.

Range. Transvaal, except the western portion, and South Rhodesia. There are also in the Museum collections four specimens from N. Rhodesia and Nyasaland which appear to be indistinguishable in size and coloration from this race. Further material, however, may prove this to be distinct. It apparently occurs side by side with S. whytii jacksoni.

#### 3. SYLVIETTA RUFESCENS PALLIDA.

Sylviella pallida Alexander, Bull. B. O. C. viii. 1898, p. 48: Zambesi River, 30 miles above Tete.

A much paler race, apparently confined to the Zambesi valley. Similar to S. r. rufescens but paler, especially on the throat, and with a smaller bill. Smaller; wing 55-58 mm.

Range. Confined to the Zambesi valley in the neighbour-hood of Tete.

It is curious to find a pale race in a locality like this, especially as a darker race is found to north and south of it.

SYLVIETTA ISABEILINA.

Sylviella isabellina Elliot, Field Columb. Mus. Publ., Orn. Ser. vol. i. 1897, p. 44: Le Gud, Somaliland.

Sylviella gaikwari Sharpe, Bull. B. O. C. xi. 1901, p. 47: Ania, Somaliland.

Sylvietta erlangeri Reichw. O. M. 1905, p. 25: Ennia Galla, Somaliland.

This species, of which S. gaikwari and S. erlangeri Reichw. appear to be synonyms, is nearly allied to the "rufescens" group. As, however, there would be a very great and unusual gap in the distribution if it were placed in that group, we prefer to regard it as a separate species.

# II. "Whytii-jacksoni" group.

### 1. SYLVIETTA WHYTII WHYTII.

Syviella whytii Shelley, Ibis, 1894, p. 13 : Zomba, Nyasaland.

Sylviella fischeri Reichw. Orn. Monatsb. 1900, p. 22: Malindi, British E. Africa.

Distinguished from the "rufescens" group by the lack of a dark stripe through the eye and the more rufous cheeks. The bill also is smaller. Underside pale rufous. Wing 52-57 mm.

According to Zedlitz (J. f. O. 1916, p. 25) S. fischeri is a synonym.

Range. Nyasaland, S. Rhodesia, and Portuguese E. Africa, north along the coast to Mombasa and the Teita country.

2. SYLVIETTA WHYTII MINIMA Grant, Ibis, 1900, p. 156: Manda Island, British E. Africa.

Very similar to S. w. whytii, but with the upperside a considerably paler grey. Wing 51-55 mm.

Range. Manda Island, British E. Africa.

# 3. SYLVIETTA WHYTII JACKSONI.

Sylviella jacksoni Sharpe, Bull. B. O. C. vii. 1897, p. 7: Kamassia, British E. Africa.

Considerably richer in colour than either of the last two

races, the underside being a very warm rufous. Wing 58-63 mm.

Range. Western British East Africa, north to Lake Zwai in south Abyssinia, south to the Usangu district of German East Africa.

In the Smithsonian Miscellaneous Collections, lvi. 1911, No. 20, p. 11, Mearns describes a race from Fort Hall as S. w. loringi. We have no specimens from Fort Hall itself, but two specimens from the Athi river in the close vicinity are indeed somewhat paler than typical specimens of S. w. jacksoni. This is only to be expected as Fort Hall is a place where the desert fauna would naturally meet with the highland fauna and an intermediate form be thus produced.

Another race, S. w. abayensis, was also described by Mearns (Smithson. Misc. Coll. lxi. 1913, No. 20, p. 4) from Lake Abaya. We have a series collected by Zaphiro from near that locality and can in no way distinguish them from typical S. w. jacksoni.

# III. "Brachyura" group.

1. SYLVIETTA BRACHYURA BRACHYURA.

Sylvietta brachyura Lafres. Rev. Zool. 1839, p. 258: Senegambia.

A very good description of this bird is given by Lafresnaye. A grey stripe through the eye, eyebrow and chin pale rufous, in some cases almost white; underside rufous with, as a rule, a well-marked white patch in the middle of the abdomen. Size small; wing 52-56 mm.

Range. Senegambia to N. Nigeria (Lake Chad).

#### 2. SYLVIETTA BRACHYURA CARNAPI.

Sylviella carnapi Reichw. O. M. 1900, p. 22: Eastern Cameroon.

? Sylviella oliviæ Alex. Bull. B. O. C. xxiii. 1909, p. 16: Bamingui river.

Very similar to S. b. brachyura, but richer in colour underneath and with a richer rufous eyebrow and chin. We have no specimens of this race, but one bird from the river Bamingui, the type of S. oliviæ, Alexander, may possibly belong to it.

Range. Eastern Cameroon, possibly to Bamingui river.

#### 3. SYLVIETTA BRACHYURA DILUTIOR.

Sylvie/la carnapi dilutior Reichw. O. M. 1916, p. 154: Ruwenzori.

Like S. b. carnapi, but the underside a slightly paler rufous. In some examples there is a considerable amount of white on the belly. Wing 53-60 mm.

Range. Uganda, the upper White Nile, and the Bahr el Ghazal.

#### 4. SYLVIETTA BRACHYURA MICRURA.

Troglodytes micrurus Rüppell, Neue Wirbelth. p. 109: Kordofan.

We have no specimens from Kordofan, but Neumann (J. f. O. 1906, p. 279), who has examined Rüppell's types, states that they belong to a desert form and are distinct from birds of the Nile valley. This appears to conclusively fix the name micrura for this form, although Rüppell's figure is more like the Abyssinian race.

#### 5. SYLVIETTA BRACHYURA NILOTICA.

Sylvietta brachyura nilotica Neum. J. f. O. 1906, p. 279: Shabeisha, White Nile Province.

This race is distinguished by Neumann from S. b. micrura on account of its richer coloration and shorter bill. It is distinguishable from S. b. carnapi, to which it is very closely allied, by the slightly paler rufous of the breast. It is in fact intermediate between S. b. carnapi and S. b. micrura. Chin slightly paler but not white, eyebrow rufous. Wing 52-58 mm.

Range. White Nile valley, east to Eritrea, and the western half of Abyssinia,

6. SYLVIETTA BRACHYURA LEUCOPSIS.

Sylviella leucopsis Reichw. Orn. Centralb. 1879, p. 114: Tana river, B.E.A.

Sylvietta brachyura tavetensis Mearns, Smithson. Misc. Coll. lxi. 1913, No. 20, p. 5: Taveta.

Sylvietta brachyura hilgerti Zedlitz, J. f. O. 1916, p. 99: Dire Daua.

This race is at once distinguishable from all others by its white eyebrow and white chin. Zedlitz distinguishes the Abyssinian and northern Somali birds by their larger size (J. f. O. 1916, p. 99). We find, however, there is such great variation in this respect that we prefer to keep them all together.

Range. From eastern Eritrea through Somaliland and eastern Abyssinia to Baringo and Kilimanjaro.

Mearns (Smithson. Misc. Coll. lxi. 1913, No. 20, p. 5) describes a race from Taveta as S. b. tavetensis. We have specimens from this locality, and cannot distinguish them from S. Somaliland examples.

As the type-locality of S. b. leucopsis is the Tana river, it would certainly be unlikely to find a different race of a desert species there, with only the Taru desert in between.

Sylvietta ansorgei Hartert, Bull. B. O. C. xix. 1907, p. 97: Huxe, Benguella, of which S. lowei (O.-Grant, Bull. B. O. C. xxvii. 1911, p. 105: S. Paul de Loanda) is undoubtedly a synonym, is a very distinct form with an almost entirely white underside, and may well remain as a distinct species.

Other described species or subspecies, the types of which we have not seen, are:—

Sylviella distinguenda Madarász, Arch. Zool. i. 1910, p. 177: Ngare-Dowash, west of Victoria Nyanza, probably = S. w. jacksoni.

Sylvietta epipolia Reichw. O. M. 1910, p. 7: N. Adamaua, is near S. carnapi but smaller.

Sylvietta rufescens ochrocara Oberholser, Smiths. Misc. Coll. xlvii. 1905, p. 373: Damaraland, is probably identical with S. r. rufescens.

Sylvietta whytei pallidior Grote, O. M. 1911, p. 13: Mikandini, Germ. E. Afr., is, according to Zedlitz, an abnormally coloured S. whytii.

Sylviella chubbi O.-Grant, S. batesi Sharpe, S. denti O.-Grant, S. hardyi Bannerman, S. neumanni Roths., all belong to an entirely different section of the genus.

#### Eremomela elegans elegans.

Ficedula elegans Heuglin, S.B. Akad. Wien, xix. 1856, p. 275: "Kollaland," i.e. Sennar on the Abyssinian border [nom. nud.].

Eremomela elegans Heuglin, J. f. O. 1864, p. 259; Reichw. V. A. iii. p. 638.

[B. coll.] 3 Roseires July Sept. Sen.

#### Eremomela elegans canescens.

Eremomela canescens Antinori, Cat. Coll. Ucc. 1864, p. 38: Djur river, B.G.

*Eremomela elegans* apud Butler, Ibis, 1908, p. 228, 1909, p. 81.

[B. coll.] 1 Dug Dug Jan., 1 Chak Chak Feb., 1 Wau Mch. B.G.; 2 Mongalla; 2 Kajo Kaji Mch. L E.

[Chr. coll.] 3 Meridi Jan., 2 Mt. Baginzi Mch., 1 Tembura Apl. B.G.; 3 Yei Nov. Dec. L.E.

The birds from Sennar are much paler than those from the south both as regards the yellow of the back and underparts and the grey of the head, and as they are practically topotypes of Heuglin's species, we identify them with the typical race.

The birds from Mongalla and the Bahr el Ghazal are very close to the southern Abyssinian bird named *E. e. abyssinica* by Bannerman, though in the original description a comparison was made with birds from the upper Nile as there were no examples of the typical race in the Museum at the time. The three forms are therefore:—

- E. e. elegans (Heugl.), with pale grey head and a paler back and underside. Sennar.
- E. e. abyssinica Bannerman, with the head more dusky and the back darker washed with greenish; underparts as in E. e. elegans. S. Abyssinia.
- E. e. canescens Ant.; head of a grey intermediate between that of the other two, a bright yellow back without greenish, and a very bright yellow underside. Upper White Nile westwards to Shari river.

### Eremomela caniceps.

Eremomela caniceps Cassin, Proc. Philad. Acad. 1859, p. 38: Camma river, Gaboon; Reichw. V. A. iii. p. 638.

[Chr. coll.] 1 Tembura Apl. B.G.

This bird is new to the Sudan and the Bahr el Ghazal, but it was obtained at Magungo on Lake Albert by Emin, and by Alexander on the Bamingui river, a tributary of the Shari, in French Congo.

### Eremomela flaviventris griseoflava.

Eremomela griseoflava Heuglin, J. f. O. 1862, p. 40: Bogosland.

[C. & L. coll.] 3 Sinkat Mch. R.S.; 2 Kamisa Dec., 2 Singa Dec., 1 Sennar Jan. Sen.

# Eremomela flaviventris alexanderi, subsp. n.

[B. coll.] 2 Bara Apl., 1 Um Bosha May, Kor.

[C. & L. coll.]. 1 Hassania Island Jan., 1 Jebelein Jan. U.N.

These birds, together with some others collected by Boyd Alexander near Lake Chad, are much paler than the birds from Sennar, Bogosland, and Abyssinia, and must be considered a distinct race. The back is a much paler shade of brown, and the lower part of the back faintly but distinctly washed with yellowish, which becomes in some cases quite a marked feature on the rump itself; this

is not due to the make up of the skins and the appearance of the yellow from below. There seems to be no difference in dimensions: the wings measure 50-55 mm.

Type, a ? from Bara, Kordofan, 27/iv./04. A. L. Butler coll., B.M. reg. no. 1916/9/20/985.

Other examples in the British Museum are:—4 near Lake Chad (Alexander), 1 Bara, Kordofan (Capt. W. H. Dunn), 1 Jebel Auli, White Nile (Hawker).

We recognize, following Ogilvie-Grant (Bull. B. O. C. xxv. 1910, p. 120), the following forms of E. flaviventris:—

- E. f. flaviventris (Burchell): Asbestos Mts., Griqualand West. Distr. Damaraland and Angola eastward to Lake Ngami, Bechuanaland, and the Western Transvaal.
- E. f. saturation O.-Grant: Deelfontein. Distr. Central Cape Colony, Deelfontein, and Kingwilliamstown.
- E. f. polioxantha Sharpe: Swaziland. Distr. Swaziland, eastern Transvaal, Rhodesia, and Nyasaland.
- E. f. abdominalis Reichw.: Tanganyika to Kikuyu. We have seen no examples of this form.
- E. f. crawfurdi Stephenson-Clarke, Bull. B. O. C. xxix. 1911, p. 43: Sotik, Br. E. Africa; only known from the type.
- E. f. flavicrissalis Sharpe: Webbe Shebeli, S. Somali. Distr. S. Somali and Jubaland, B. E. Afr.; with this we unite E. erlangeri Reichw. It is easily distinguished by its small size; wing under 50 mm.
- E. f. griseoflava Heuglin: Bogosland. Distr. Sennar and Red Sea Province of the Sudan south to Shoa and northern Somaliland.
- E. f. alexanderi, vide supra. Upper White Nile to Kordofan and L. Chad.

# Camaroptera griseoviridis griseoviridis.

Orthotomus griseoviridis v. Müller, Naumannia, i. pt. 4, 1851, p. 27: Kordofan.

Camaroptera g. griseoviridis Zedlitz, J. f. O. lix, 1911, p. 334.

Camaroptera brevicaudata (nec Cretzsch.); Butler, Ibis, 1905, p. 331.

- [B. coll.] 3 Roseires Apl. July, 1 Fazogli May, Sen.; 1 Jebel Melbis Apl. Kor.; 1 Renk Mch., 1 Taufikia Apl. U.N.
- [C. & L. coll.]
  5 Erkowit Apl. R.S.; 4 Kamisa Dec.,
  1 Singa Dec. Sen.; White Nile lat. 13° N. Jan.
  W.N.: Tonga Feb. U.N.

#### Camaroptera griseoviridis abessinica.

Camaroptera griseoviridis abessinica Zedlitz, J. f. O. lix. 1911, p. 338: Harrar.

Camaroptera brevicaudata (nec Cretzsch.) Butler, Ibis, 1908, p. 228, 1909, p. 82.

[B. coll.] 2 Wau Apl. B.G.; 3 Mongalla "summer," 2 Sheikh Tombé "summer," 2 Kenisa Jan. Mon.

[C. & L. coll.] 3 nr. Lake No Feb Mch. W.N.

[Chr. coll.] 1 Yambio Mch., 1 Tembura Apl. B.G.

Count Zedlitz has monographed this very difficult group, and we are content to follow his conclusions. We find the birds from the Mongalla Province and Bahr el Ghazal are distinctly darker and more richly coloured, and agree best with C. g. abessinica, of which the Museum contains a good series; while those from lower White Nile from Taufikia downwards agree with the paler Kordofan form. The examples from Erkowit and Roseires are intermediate, being darker than the others and approaching the Abyssinian form.

Camaroptera brevicaudata Cretzsch. from Kordofan is believed by Zedlitz to be the young bird of a form of the group C. superciliaris of West Africa, distinguished by its yellow eye-stripe and green back. If this is so, there is nothing at all like it in the Museum collection or among the Butler birds. Our opinion is that Cretzschmar's description and figure is founded on a young bird of what we here call C. griseoviridis. We have in the series before us two

skins from Mongalla which we believe to be nothing but young birds. These are distinctly greenish, changing to brown on the head, and appear to us to accord very well with Cretzschmar's description and figure. If our conclusion is correct, the name of this bird will of course have to be changed back to *C. brevicaudata* Cretzsch.

Prinia gracilis gracilis.

Sylvia gracilis Lichtenstein, Verz. Doubl. 1823, p. 34: Nubia.

Burnesia gracilis Butler, Ibis, 1905, p. 332.

Prinia gracilis Butler, Ibis, 1909, p. 395.

[B. coll.] 2 Khor Arbat May, R.S.; 2 Khartoum Apl. July.

[C. & L. coll.] 4 Port Sudan Dec. Apl. R.S.

There is some doubt as to the distribution of the races of this bird. The Red Sea Province birds seem slightly darker, but a considerably larger series would be necessary before we could offer any opinion.

#### Prinia mistacea mistacea.

Prinia mistacea Rüpp. Neue Wirbelth. 1835, p. 110: Gondar, N. of L. Tsana, Abyssinia.

Prinia mystacea and murina Butler, Ibis, 1905, p. 332, 1909, p. 82.

- [B. coll.] 1 Disa Apl., 2 Roseires Aug. Sen.; 1 nr. Renk Dec., 1 Taufikia Apl. U.N.; 1 Bahr el Jebel May, 2 Bahr el Zeraf June, 4 Kenisa summer, Mon.; 1 Wau Apl. B.G.
- [C. & L. coll.] 1 Singa, 1 Eneikliba, 10 Kamisa Dec. Sen.; 13 White Nile between Jebelein and Lake No Jan. Feb.

[Chr. coll.] 1 Tembura Apl., 2 Meridi Jan. Feb. B.G.

The races of *Prinia mistacea* do not appear to have been hitherto worked out. The following is the result of an examination of the long series in the British Museum:—

1. Prinia mistacea mistacea (see above).

With a very pronounced seasonal plumage change, the winter (October to March) birds being very bright rufous and the summer (April to September) pale grey. Wing 46-52; tail in summer averages 50, in winter 60-62 mm.

Distr. Abyssinia westwards through the Sudan to Northern Nigeria and Gold Coast hinterland; probably to Senegal, and in that case Drymoica superciliosa of Swainson will be a synonym.

D. murina Heuglin, Ibis, 1869, p. 90: N. Abyssinia, was founded on a bird in summer plumage and is undoubtedly a synonym.

2. Prinia mistacea melanorhyncha (D. melanorhynchus Jard. & Fraser, Contr. Orn. 1852, p. 60: Abomey).

Birds from west African coastlands from Portuguese Guinea to Southern Nigeria have, so far as we can see, no plumage change. They resemble the summer birds of *P. m. mistacea*, but are considerably darker and more richly coloured. Wing 45-51 mm.

Cameroon birds are intermediate between this form and the next.

3. Prinia mistacea tenella (*Drymæca tenella* Cabanis in Von der Decken's Reisen, iii. 1869, p. 23: Mombasa).

This form has no plumage change and closely resembles the last-named, but is rather larger: wing 48-55 mm.

Distr. East Africa and Uganda to the Belgian Congo.

4. Prinia Mistacea Affinis (Drymoica affinis Smith, Illustr. Zool. S. Afr., Aves, 1843, pl. 77: interior of S. Afr.).

With a pronounced seasonal plumage change corresponding to that of *P.m. mistacea* but reversed, the summer being October to March and the winter March to October. Flanks very tawny in winter plumage. Larger: wing 48-55 mm.

Distr. South Africa from N. Rhodesia and northern Angola southwards.

# Family TURDIDÆ.

Turdus philomelos philomelos.

Turdus philomelos philomelos Brehm; Hartert, Vög. pal. Faun. p. 650.

Turdus musicus auct.; Butler, Ibis, 1908, p. 233.

[B. coll.] 1 Erkowit Mch. R.S.; 2 Khartoum Nov. Feb.

A rare winter bird so far south. It is not given in Reichenow as an African bird, but Hartert states it was taken by Beccari in Eritrea in Dec. 1905.

Abundant on migration at Erkowit (A. L. B.).

Turdus torquatus alpestris.

Turdus torquatus alpestris (Brehm); Hartert, Vög. pal. Faun. p. 665.

Turdus torquatus apud Butler, Ibis, 1905, p. 337.

[B. coll.] 1 Khartoum Dec.

This is not only the sole record of the occurrence of the Ring Ouzel in the Sudan, but is also apparently the first time that the southern European race has been met with anywhere in Africa. T. t. alpestris is distinguishable at a glance from T. t. torquatus by the much broader white edges to the feathers of the underside.

Capt. S. Flower also obtained a Ring Ouzel at Dongola (A. L. B.).

Turdus libonyanus pelios.

Turdus pelios Bp. Consp. i. 1850, p. 273: Central Asia! N.E. Africa apud Seebohm, Cat. B. M. v. p. 230; Reichw. V. A. iii. p. 690; Butler, Ibis, 1905, p. 337, 1908, p. 233, 1909, p. 82.

[B. coll.] 2 Gallabat Mch. Apl. Kas.; 4 Roseires July Aug., 1 Gerif Apl. Sen.; 1 Meshra Zeraf May, U N.; 3 Wau Jan. Apl., 1 Chak Chak Feb. B.G.

[C. & L. coll.] 3 Kamisa Dec. Sen.

[Chr. coll.] 3 Meridi Jan. Feb., 3 Yambio Mch., 1 Wau, B.G.; 4 Yei Nov. Dec. L.E.

The birds from the Bahr el Ghazal are rather more richly

coloured and have more orange on the flanks; they are intermediate between this form and T. l. centralis Reichw. from Uganda and the Lake districts.

Turdus merula, subsp.?

Mr. Butler informs us that a Blackbird frequented a garden at Port Sudan in 1912, but it does not appear to have been taken, and cannot be satisfactorily identified.

#### Monticola solitarius solitarius.

Monticola solitarius solitarius (Linn.); Hartert, Vög. pal. Faun. p. 674.

Monticola cyanus auct.; Butler, Ibis, 1905, p. 338.

[B. coll.] 2 Khartoum Oct. Feb.

[C. & L. coll.] 1 Sinkat Mch. R.S.; 3 Jebelein Jan. W.N.

A common winter visitor.

#### Monticola saxatilis.

Monticola saxatilis (Linn.); Hartert, Vög. pal. Faun. p. 671; Butler, Ibis, 1905, p. 338, 1908, p. 234, 1909, p. 83.

[B. coll.] 1 Gerif Apl. Sen.: 2 Khartoum Oct.; 2 Chak
Chak Feb. Mch., 1 nr. Kojali Feb., 1 Tembura Mch.
B.G.; 1 Mongalla Feb.; 1 Lado Feb., 1 Rejaf Feb.
L.E.

[C. & L. coll.] 1 Erkowit Apl. R.S.

[Chr. coll.] 1 Meridi Feb. B.G.

A common winter visitor.

## Phenicurus phenicurus phenicurus.

Phænicurus phænicurus phænicurus (Linn.); Hartert, Vög. pal. Faun. p. 718.

Ruticilla phænicurus (Linn.); Butler, Ibis, 1905, p. 336, 1908, p. 232, 1909, pp. 82, 397.

[B. coll.] 4 north Berber Prov. Nov.; 1 Port Sudan Nov. R.S.; 1 Roseires Apl., 1 Jebel Maba Apl. Sen.; 5 Khartoum Oct. Nov. Feb.; 1 Chak Chak Mch., 1 Tonj Jan., 1 Raffali Feb., 1 Tembura Mch. B.G. [C. & L. coll.] 1 Singa Dec. Sen.; 3 nr. Lake No Feb. U.N. [Chr. coll.] 1 Meridi Jan. B.G.; 4 Yei Nov. Dec. L.E.

One of Yei birds has light edges to the secondaries and might perhaps be a P. p. mesoleucus, but it is impossible to distinguish them when out of plumage.

A common winter visitor to the Sudan.

#### Phænicurus ochruros.

Phænicurus ochruros ochruros (G. S. Gmel.); Hartert, Vög. pal. Faun. p. 722.

[C. & L. coll.] 2 Kamisa Dec. Sen.; 1 White Nile lat. 14° Jan. W.N.

These are all females, and it is impossible to determine to which race of the Black Redstart they should be assigned. There are several other examples in the British Museum also indeterminable. In Abyssinia and Somaliland the prevailing form would appear to be P. o. phanicuroides, if this is really separable from P. o. ochruros.

Heuglin states that the Black Redstart comes to southern Nubia only in the winter.

## Cyanosylvia suecica suecica.

Luscinia suecica suecica (Linn.); Hartert, Vög. pal. Faun. p. 745.

Cyanecula suecica Butler, Ibis, 1905, p. 337, 1908, p. 233.

[B. coll.] 1 Khartoum Apl.; 1 Kaka Feb. U.N.

[C. & L. coll.] 1 Jebel Ahmed Aga Jan., 1 nr. Tonga Feb. U.N.

Only one of these birds is in full plumage; it appears to belong to the typical race which breeds in north-east Europe and western Siberia.

Scarce as compared to its abundance in Egypt (A. L. B.).

# Cyanosylvia suecica magna.

Luscinia suecica magna (Sarudny & Loudon); Hartert, Vög. pal. Faun. p. 750.

[B. coll.] 1 Port Sudan Apl. R.S.

This bird, with an almost unspotted pale blue throat and

a wing of 81 mm., appears to be referable to this form. It is known from Arabistan, south-western Persia, and probably breeds in the highlands of Armenia.

### Cyanosylvia suecica cyanecula.

Luscinia suecica cyanecula (Wolf); Hartert, Vög. pal. Faun. p. 748.

Mr. Butler informs us that a good many White-spotted Bluethroats are to be found about Port Sudan on the spring migration in April, and that Mr. Nicoll identified two adult males with this form.

### Luscinia megarhynchos megarhynchos.

Luscinia megarhynchos megarhynchos Brehm; Hartert, Vög. pal. Faun. p. 733.

Luscinia luscinia apud Butler, Ibis, 1908, p. 233.

[B. coll.] 1 Bahr el Ghazal river, Jan.

[C. & L. coll.] 1 Port Sudan Apl. R.S. (Wings only kept, but probably belonging to this race.)

[Chr. coll.] 1 Yei Nov. L.E.

#### Luscinia luscinia.

Luscinia luscinia (Linn.); Hartert, Vög. pal. Faun. p. 736.

Lusciola golzi apud Butler, Ibis, 1905, p. 337.

[B. coll.] 4 Khartoum Sept. & Oct.

Large numbers of the Sprosser pass through Khartoum on the autumn migration (A. L. B.).

## Cercotrichas podobe.

Turdus podobe St. Müll., Linn. Nat. Syst. Supp. 1776, p. 145: Senegal.

Cercotrichas podobe (Müll.); Reichw. V. A. iii. p. 763; Butler, Ibis, 1908, p. 230, 1909, p. 395.

- [B. coll.] 2 Gebeit Mch., 2 Khor Arbat May, R.S.; 1 Khartoum July; 1 Jebelein Nov. W.N.
- [C. & L. coll.] 1 Port Sudan Dec., 2 Sinkat Mch. R.S.; 3 Kamisa Dec. Sen.; 3 White Nile lat. 13° & 14° N. Jan. W.N.

Cossypha heuglini heuglini.

Cossypha heuglini Hartlaub, J. f. O. 1866, p. 36: Wau (not Keren as stated by Hartlaub, vide Heuglin, Orn. N.O.-Afr. i. p. 375); Reichw. V. A. iii. p. 758; Butler, Ibis, 1908, p. 232, 1909, p. 82.

[B. coll.] 1 nr. Rumbek Jan., 1 Katta Jan. B.G.; 1 Mongalla Jan., 1 Shambé Jan. Mon.

[Chr. coll.] 1 Wau July-Aug. B.G.

This is a widespread species, ranging with but slight variation from the Upper Nile to the Transvaal. Birds from southern Angola and Nyasaland and south of the Zambesi are more olivaceous on the back and more richly rufous below, and may be distinguished as C. h. subrufescens Bocage (P. Z. S. 1869, p. 553: Caconda, Angola). The coast-bird of East Africa is also possibly distinguishable by its richer rufous underparts, but hardly deserves separation.

## Cossypha verticalis verticalis.

Cossypha verticalis Hartlaub, Abh. Geb. Nat. Hamb. 1852, p. 23: Elmina [nom. nud.]; id. Syst. Orn. Westafr. 1857, p. 77; Reichenow, V. A. iii. p. 761; Butler, Ibis, 1908, p. 232.

[B. coll.] 5 Roseires Apl. Sept. Sen

[C. & L. coll.] 5 Kamisa Dec. Sen.

[Chr. coll.] 1 Yambio Mch., 1 Tembura Apl. B.G.; 3 Yei Nov. L.E.

The Christy birds from Lado and the Bahr el Ghazal are slightly larger and darker coloured; they also have a wider band of white on the crown. In these respects they approach C. v. melanonota (Cabanis, J. f. O. 1875, p. 235: Tschintschoscho, Loango) which ranges north to Uganda. The Roseires birds, on the other hand, appear to be indistinguishable from the Gold Coast birds which range eastwards along the Welle river, where Alexander procured a good series.

# Cichladusa guttata guttata.

Crateropus guttatus Heugl. J. f. O. 1862, p. 300: Bahr el Abiad.

Cichladusa guttata (Heugl.); Reichw. V. A. iii. p. 766; Butler, Ibis, 1908, p. 232.

[B. coll.] 1 Gadein Jan. B.G.; 5 Mongalla, 3 Bor summer, Mon.

Erythropygia leucoptera ruficauda.

Erythropygia ruficauda Sharpe, P. Z. S. 1882, p. 589, pl. 45: Malimbe, Congo; Reichenow, V. A. iii. p. 773.

[B. coll.] 1 nr. Chak Chak Mch. B.G.; 1 Rejaf Feb. L.E.

[Chr. coll.] 2 Yei Nov. L.E.

These birds match very well a small series collected on Ruwenzori, but they differ from the typical Congo form in having less black on the outer tail-feathers, and are in this respect intermediate between E. l. ruficauda and E. l. leucoptera of N.E. Africa. It seems to be a rare bird in the Sudan, not having been previously recorded, and only found in the Lado Enclave.

Mr. Butler mentions that one day near Port Sudan an undoubted *Erythropygia* entered his tent, but escaped before he could secure it. We know of no species yet recorded from that locality.

Thamnolæa albiscapulata albiscapulata.

Saxicola albiscapulata Rüppell, N. Wirbelth. 1836, p. 74, pl. 26: Abyssinia.

Thamnolæa albiscapulata (Rüpp.); Reichenow, V. A. iii. p. 703.

[B. coll.] Jebel Fazogli May, Sen.

This bird was also recorded by Heuglin from east Sennar, but does not appear to extend much farther west than the Abyssinian border.

Thamnolæa albiscapulata subrufipennis.

Thamnolæa subrufipennis Reichenow, J. f. O. 1887, p. 78: Ussure, German East Africa; id. V. A. iii. p. 702.

[B. coll.] 1 Lado Mch. L.E.

This bird does not seem to have previously been recorded

from the Sudan; it is known from various localities in Uganda, and was also obtained by Boyd Alexander at several places between Bauchi in Northern Nigeria and the headwaters of the Welle river. It is distinguished from *T. a. albiscapulata* by the red, instead of black, bases to the tail-feathers.

#### Thamnolæa nigra.

Enanthe nigra Vieillot, N. Dict. xxi. 1818, p. 431: Malimbe (vide Finsch, Notes Leyden Mus. xxii. 1900, p. 158). Myrmecocichla nigra (Vieill.); Grant, Ibis, 1908, p. 299.

[B. coll.] 2 Lado Apl., 2 Kajo Kaji Mch. Apl. L.E. [Chr. coll.] 1 Yei Dec. L.E.

This bird is abundant in Uganda, but has not been recorded previously so far north as Lado. Alexander obtained it on the Welle river.

#### Thamnolæa coronata kordofanensis.

Thamnolaa coronata kordofanensis Wettstein, Anz. Akad. Wien, liii. 1916, p. 131: S. Kordofan.

There are no examples referable to this form in the Museum or in the Butler collection, nor are there any examples of the typical T. c. coronata from Togoland (Reichenow, O. M. 1902, p. 157). We have been unable to find the type of T. claudi Alexander (Bull. B. O. C. xvi. 1906, p. 124) from Lake Chad, which was afterwards stated by the describer (Bull. B. O. C. xxiii. 1908, p. 16) to be the female of T. coronata.

#### Pentholæa clericalis.

Pentholæa clericalis Hartlaub, Orn. Centralb. 1882, p. 91: nr. Lado.

[Chr. coll.] 11 Yei Nov. Dec. L.E.

This is a bird of restricted distribution confined to the Lado Enclave, where it was discovered by Emin, and to the upper valley of the Welle, whence Alexander obtained an example.

A pair shot by me at Kajo Kaji are now in the Gordon College Museum (A. L. B.).

Saxicola torquata maura.

Pratincola torquata maura (Pall.); Hartert, Vög. pal. Faun. p. 707.

Pratincola rubicola (Linn.); Butler, Ibis, 1905, p. 336.

- [B. coll.] 1 Shendi Jan. Ber.; 1 Port Sudan Apl. R.S.; 4 Khartoum Nov. Jan. Feb.; 1 Renk Feb. U.N.
- [C. & L. coll.] 3 nr. Renk Jan. Mch., 1 Tonga Feb., 1 between Sobat and Zeraf rivers Feb. U.N.

The Stonechat of the Sudan obviously belongs to the race breeding in the Caucasus and Persia. On the other hand, most of the Egyptian birds belong to the European S. t. rubicola.

#### Saxicola rubetra rubetra.

Pratincola rubetra rubetra (Linn.); Hartert, Vög. pal. Faun. p. 702; Butler, Ibis, 1905, p. 336, 1908, p. 232.

[B. coll.] 3 Kenisa Oct. Mon.

[Chr. coll.] 1 Meridi Feb. B.G.; 6 Yei Nov. Dec. L.E.

The Whinchat is a common migrant in the Sudan, but the majority pass on to the southern districts of Mongalla and the Bahr el Ghazal to winter (A. L. B.).

# Cercomela melanura lypura.

Sylvia lypura Hempr. & Ehr. Symb. Phys. 1828, fol. ee: Abyssinia (eastern Eritrea apud Neumann & Zedlitz).

Cercomela melanura lypura (H. & E.); Neumann & Zedlitz. J. f. O. 1913, p. 365.

Myrmecocichla leipura (H. & E.); Butler, Ibis, 1908, p. 235, 1909, p. 399.

[B. coll.] 1 Erkowit Mch., 2 Khor Arbat May, 2 Jebel Bawati May, R.S.

[C. & L. coll.] 3 Sinkat Mch., 1 Kamobsana Dec. R.S.

Found breeding by Butler in the Khor Arbat hills. Neither this nor the brown-tailed C. s. scotocerca had been previously found farther north than Eritrea; they both appear to occur together in the same localities, and we think it is possible they are two forms of the same species. Mr. Butler is also of this opinion. A quite young bird has a black tail like the adult.

There are two unrecorded examples of C. m. lypura in the British Museum obtained by Captain W. H. Dunn in the Haraza hills of northern Kordofan in November 1902.

#### Cercomela scotocerca scotocerca.

Saxicola scotocerca Heuglin, Orn. N.O.-Afr. i. Sept.? 1869, p. 363: Keren.

Ruticilla fuscicaudata Blanford, Ann. Mag. N. H. (4) iv. Nov. 1869, p. 329.

Cercomela scotocerca scotocerca (Heugl.); Neumann & Zedlitz, J. f. O. 1913, p. 367.

Bradyornis pumilus (nec Sharpe), Butler, Ibis, 1908, p. 236.

[B. coll.] 3 Erkowit Mch. R.S.

[C. & L. coll.] 3 Erkowit Mch. Apl. R.S.

The question of the priority of Heuglin's and Blanford's names for this species seems a little doubtful. Heuglin (Orn. N.O-Afr. ii, p. 81) in his supplement claims that his name was published in September, but the titlepage of the volume bears the date November 1869; Blanford's was published in the November number of the Annals & Mag. N. H.

#### Enanthe enanthe enanthe.

Saxicola enanthe enanthe (Linn.); Hartert, Vög. pal. Faun. p. 679; Butler, Ibis, 1908, p. 234, 1909, p. 83.

- [B. coll.] 1 Gedaref Apl. Kas; 1 Roseires Apl. Sen.; 2 Khartoum Apl. May; 1 Fachi Shoya Nov. W.N.; 1 Mayik Jan., 1 Gadein Jan., 1 Raffali Feb., 1 Wau Apl. B.G.; 1 Mongalla, 2 Gigging Oct., 2 Bor Oct. Mon; 1 Lado Feb.
- [C. & L. coll.] 8 between Lake No and Bahr el Zeraf Feb. U.N.

[Chr. coll.] 2 Meridi Feb. B.G.; 1 Yei Dec. L.E.

These Wheatears are rather larger than the ordinary European birds. The wings of adult males average 98, some reaching 103 mm.

The dates of capture extend from October to May 7. A common winter bird according to Butler.

#### Enanthe isabellina.

Saxicola isabellina Cretzschmar, Atlas Rüpp. Reise, 1826, p. 52: Nubia; Hartert, Vög. pal. Faun. p. 691; Butler, Ibis, 1905, p. 339, 1908, p. 235, 1909, p. 83.

- [B. coll.] 3 Khartoum Nov. Feb.; 1 Wau Jan. B.G.; 1 Rejaf Feb. L.E.
- [C. & L. coll.] 2 Port Sudan Dec. R.S.; 1 White Nile lat. 14° Jan. W.N.; 1 Jebel Zeraf Feb. U.N.

#### Enanthe heuglini.

Saxicola heuglini Hartl. & Finsch in Heuglin's Orn. N.O.-Afr. 1869, p. 346: Gondar; Reichw. V. A. iii. p. 720; Butler, Ibis, 1905, p. 339, 1908, p. 234.

- [B. coll.] 1 Gedaref May, Kas.; 1 Khartoum July; 1 Malakal Jan. U.N.: 1 Mayik Jan. B.G.
- [C. & L. coll.] 13 nr. Jebel Zeraf Feb., 1 Tonga Feb. U.N.

Among the birds collected by Messrs. Chapman & Lynes are several young examples in the spotted plumage; they differ from the adults in having the shoulders and wing-coverts spotted with rufous, and the tips of the primaries and secondaries and the edges of the latter edged with rufous; below, the edges of the breast-feathers are dusky, forming crescentic marks.

There are examples of this species in the Museum from the Sobat river and other localities on the White Nile, but not from Abyssinia whence the type is said to have come. On the other hand, *E. bottæ*, its larger representative, seems to be confined to the higher elevations of the Abyssinian plateau, and we doubt its occurrence in Sennar as recorded by Heuglin.

# Enanthe xanthoprymna xanthoprymna.

Saxicola xanthoprymna Hemprich & Ehrenberg, Symb. Phys. 1833, fol. dd: Nubia.

Saxicola xanthoprymna H. & E.; Hartert, Vög. pal. Faun. p. 693.

[C. & L. coll.] I Port Sudan Dec. R.S.

There are only four other examples of this rare Chat in the Museum, three from Egypt dated February and March and one collected by Cholmley (vide Ibis, 1897, p. 204) at Ras Rowaya north of Port Sudan in February, where he states it was not uncommon.

It is probably only a winter bird, breeding in Arabia or elsewhere.

### Enanthe xanthoprymna cummingi.

Saxicola cummingi Whitaker, Bull. B. O. C. x. 1899, p. 17: Fao.

Saxicola xanthoprymna cummingi Hartert, Vög. pal. Faun. p. 693.

- [B. coll.] 1 Jebel Kerbosh, 1 Jebel Okokreb Mch. R.S.; 1 Bir Nurayet Nov. Ber.
- [C. & L. coll.] 3 Port Sudan Dec., 1 Sinkat Mch. R.S.

Of this Chat the Museum possessed only two examples previously. One the type, from Fao, the other the type of Saxicola hawkeri O.-Grant (Bull. B. O. C. xxi. 1908, p. 94) from Berber. There seems to be no doubt that this latter is a rather dark-coloured female of this race. The skin has obviously been cleaned up and repaired, which may account for the dark coloration. How far the distinguishing character of these two races—namely, the colour of the base of the tail-feathers, white in Œ. x. xanthoprymna, rufous in Œ. x. cummingi—holds good, we are by no means certain, as the two Butler birds from the Red Sea Province are somewhat intermediate.

## Enanthe lugens persica.

Saxicola persica Seebohm, Cat. Bds. B. M. v. 1881, p. 372: Shiraz, Persia; Hartert, Vög. pal. Faun. p. 696.

[B. coll.] 1 Bir Shigrib, 1 Bir Likeit Nov. Ber.

There seem to be three races of Œ. lugens as follows:-

1. Œ. L. HALOPHILA. White on inner web of primaries not extending to the shaft. Back of head in adults clean white or nearly so. Wing averages 90 mm.

Range. Algeria, Tripoli, and Cyrenaica.

2. Œ. L. LUGENS. White on inner web of primaries extending to shaft. Otherwise like Œ. l. halophila, but slightly larger. Wing 89-96 mm.

Range. Palestine to Egypt.

3. Œ. L. PERSICA. Very like Œ. l. halophila, with very little white on the primaries, but with a darker back to the head in adults and usually redder under tail-coverts. Size larger, wing usually over 95 mm. The white on the primaries is usually not so pure.

Range. E. Persia etc. to Egypt and the Sudan in winter. All the Egyptian specimens before us with little white on the primaries are referable to this race and not to Œ. l. halophila, though this last-named race is said to have been obtained in Egypt by Nicoll.

## Enanthe hispanica melanoleuca.

Muscicapa melanoleuca Güldenstädt, Nov. Comm. Petrop. xix. 1775, p. 468, pl. 15: Georgia, Caucasus.

Saxicola aurita and S. melanoleuca apud Butler, Ibis, 1905, pp. 338, 339, 1908, p. 234, 1909, p. 398.

- [B. coll.] 2 Port Sudan Apl., 7 Gebeit Mch., 1 Khor Arbat May, 1 Halfaia Mch. R S.; 9 Khartoum Oct. Feb. Mch. Apl.; 1 Fachi Shoya Nov., 1 Hillet Abbas Dec. W.N.; 1 Jebel Ahmed Aga Feb. U.N.
- [C. & L. coll.] 3 Sennar Dec., 4 Kamisa Dec. Sen.; 1 White Nile lat. 14° N. W.N.; 1 Tonga Feb., 1 Melut Jan. U.N.

Both white-throated and black-throated males are found among these Chats, and we presume that they must now be regarded as phases or dimorphic forms of the same species. The evidence certainly seems very strong.

#### Enanthe leucomela leucomela.

Saxicola pleschanka pleschanka (Lepechin); Hartert, Vög. pal. Faun. p. 688.

Saxicola pleschanka Butler, Ibis, 1905, p. 339, 1908, p. 235.

Enanthe leucomela (Pall.); B. O. U. List Brit. Birds, p. 103.

- [B. coll.] 2 Port Sudan, Apl. R.S.; 5 Khartoum Mch. Oct. Nov.; 1 Kawa Nov. W.N.
- [C. & L. coll.] 1 Singa, 1 Kamisa Dec. Sen.; 1 White Nile lat. 14° N. Jan.

We do not regard Lepechin's names as truly binomial, and prefer to use Pallas's, which was published in the same volume and the same year, about 80 pages further on.

#### Enanthe monacha.

Saxicola monacha Temm.; Hartert, Vög. pal. Faun. p. 701.

This Chat, distinguished at once by its tail, the outer feathers of which are white or nearly white, is stated by Hartert to have occurred at Suakim, while the type came from Nubia. It is not represented in the Butler or Chapman and Lynes collections.

Koenig (Verhandl. V. Intern. Orn. Kongr. Berlin, 1911, p. 540) states that he met with a pair (? at Serkemalto 31/i./03, 3 at Koyeka 2/ii./03) between Wadi Halfa and Khartoum.

## Enanthe deserti atrogularis.

Saxicola atrogularis Blyth, J. A. S. B. 1847, p. 131: N. India.

Saxicola deserti atrogularis Hartert, Vög. pal. Faun. p. 684.

Saxicola deserti Temm.; Butler, Ibis, 1905, p. 339, 1908, p. 235.

[B. coll.] 15 N. Berber Prov. (various localities) Nov.; 1 Kamobsana Mch. R.S.; 1 Blue Nile winter; 8 Khartoum, Nov. Dec. Feb. [C. & L. coll.] 4 Port Sudan Dec., 2 Sinkat Mch. R.S.; 2 nr. Sennar Jan., 1 Kamisa Dec. Sen.; 1 El Dueim Jan. W.N.

All these Desert Wheatears were taken in winter, and appear to belong to the eastern race, though one or two specimens show some approach to the smaller and more rufous form resident in northern Africa; we have no evidence that the Desert Wheatear ever breeds in the Sulan, and the examples taken in March by Capt. Lynes are ticketed "sexual organs very small."

#### Enanthe lugentoides.

Saxicola lugentoides Seebohm, Cat. Bds. B. M. v. 1881, p. 371: Sennar.

This Chat has not apparently been met with in the Sudan since it was collected by Botta in 1839. There is a large series in the Museum from southern Arabia.

#### Enanthe sennaarensis.

Saxicola sennaarensis Seebohm, Cat. Bds. B. M. v. 1881, p. 391: Sennar.

This bird, which is described by Seebohm as closely resembling Enanthe familiaris of South Africa, is only known from the type in the Paris Museum, said to have been obtained by Botta in Sennar about 1839, The locality is probably a wrong one, as is also the case with several other species such as Enanthe lugentoides, which was stated by Botta to come from Sennar, but which has since only been found in southern Arabia.

## Enanthe leucopyga.

Saxicola leucopyga (Brehm); Hartert, Vög. pal. Faun. p. 699.

Saxicola leucopygia Butler, Ibis, 1908, p. 235, 1909, p. 398.

[B. coll.] 12 Khor Arbat Apl. May, 6 Jebel Bawati May, R.S.

[C. & L. coll.] 6 Sinkat Mch., 1 Erkowit Apl. R.S.

## Family TIMELIIDÆ.

Argya rubiginosa rubiginosa.

Crateropus rubiginosus Rüpp. Syst. Übers. 1845, p. 47, pl. 18: Ali Amba, Shoa.

[B. coll.] 3 Mongalla July-Sept., 1 Sheik Tombé May, 3 Bor Jan. & summer, Mon.

There seem to be two recognizable races of this bird :-

1. A. R. RUBIGINOSA (Rüpp.). From the White Nile and Abyssinia to inland German and British East Africa.

Synonyms of this are:

Crateropus rufescens Heugl. J. f. O. 1863, p. 24: Upper Bahr el Abiad.

Argya rufula Heugl. Orn. N.O.-Afr. iv. Appendix, p. ccexiii.

Argya rubiginosa emini Reichw. O. M. 1907, p. 30: Unyamwesi, G.E.A.

We can see no difference between birds from the White Nile, Abyssinia, and the Masai country.

### 2. A. R. HEUGLINI.

Argya heuglini Sharpe, Cat. Bds. B. M. vii. 1883, p. 391: Zanzibar.

From southern Somaliland to the coasts of British and German East Africa.

A much richer coloured bird, especially the underside, which is all one shade of rich rufous, and does not get paler on the belly.

Synonyms are: Argya saturata Sharpe, P. Z. S. 1895, p. 488: Zanzibar. And possibly

Argya sharpii Grant & Reid, Ibis, 1901, p. 662: Shebeli. There has been much confusion about the names and races of these two birds. Rüppell first described the first race from Shoa. Later, in 1863, Heuglin described the same bird, which he believed to be a different form, under the name Crateropus rufescens from the upper White Nile; subsequently, finding the specific name rufescens was already preoccupied by the use of it for an Indian species by Blyth,

he changed the name in the index of the Orn. N.O.-Afr. to C. rufula.

In the meantime Sharpe, in the Catalogue, not realizing that Heuglin had already suggested a substitute name, proposed to call Heuglin's bird after him—Argya heuglini; unfortunately he did not describe Heuglin and Rüppell's bird, but the darker coast bird, so that the name heuglini corresponds to the description, but not to the synonymy or the distribution given in the Catalogue of A. heuglini. In 1895, when describing Dr. Donaldson Smith's collection from western Somaliland, he identified a bird from the Shebeli in south Somaliland with Rüppell's species; distinguished it by its larger size and rather different appearance from the birds of the upper White Nile, and also gave a new name A. saturata to his own A. heuglini.

Finally, Ogilvie-Grant and Reid (Ibis, 1901, p. 661), when describing the Pease collection from southern Abyssinia, after identifying the Pease birds with Rüppell's original A. rubiginosa, gave a new name (A. sharpii) to the Shebeli bird collected by Donaldson Smith on the strength of its larger size and slightly different markings. Unfortunately the Shebeli bird is not in the Museum, and it cannot therefore be compared with the other two races, and until this can be done it must remain a doubtful form. In response to our inquiries Mr. Witmer Stone has been good enough to search for it in the Museum of the Academy of Sciences at Philadelphia, but, although the bulk of Dr. Donaldson Smith's first Somali collection went to Philadelphia, the Shebeli Babbler was not among them.

## Argya acaciæ.

Sphenura acaciæ Licht. Verz. Doubl. 1823, p. 40: Nubia. Argya acaciæ Butler, Ibis, 1905, p. 330, 1908, p. 228, 1909, p. 395.

- [B. coll.] 1 Port Sudan May, 2 Jebel Bawati May, 1 Erkowit Mch. R.S.
- [C. & L. coll.] 3 Port Sudan Dec. Apl., 4 near Sinkat Mch. R.S.

694

Crateropus plebeius plebeius.

Ixos plebejus Cretzschmar, Atlas zu der Reise, 1826, p. 35, pl. 23: Kordofan.

Crateropus plebeius plebeius (Cretzsch.); Neumann, J. f. O. 1904, p. 548.

Crateropus cordofanicus Butler, Ibis, 1905, p. 330, pl. vii.: Kordofan.

[B. coll.] 1 Jebel Melbis Apl. Kor. [type of C. cordo-fanicus Butler].

There can be no doubt whatever that this bird, described by Butler as new, is identical with that originally described by Cretzschmar from Rüppell's collection in Kordofan. It was previously known only from the two types in the Senckenberg Museum in Frankfurt, and a third example in the Berlin Museum.

Crateropus plebeius cinereus.

Crateropus cinereus Heuglin, SB. Akad. Wien, xix. 1856, p. 282: White Nile from 6° N.L.; id. J. f. O. 1862, p. 300.

Crateropus plebeius cinereus Heugl.; Neumann, J. f. O. 1904, p. 548.

Crateropus plebeius apud Butler, Ibis, 1908, p. 228, 1909, p. 81.

[B. coll.] 1 Baval Jan., 1 Ukanda Jan., 1 Wau Apl. B.G.; 1 Mongalla Jan.; 3 Rejaf Feb. Apl. L.E.

[Chr. coll.] 2 Meridi Feb., 2 Yambio Mch., 1 Wau July-Aug. B.G.; 5 Yei Nov. Dec. L.E.

Distinguished at a glance from C. p. plebeius by its considerably darker coloration.

Crateropus leucocephalus leucocephalus.

Turdoides leucocephalus Cretzschmar, Atlas zu der Reise, 1826, p. 6, pl. 4: Sennar.

Crateropus leucocephalus leucocephalus Neumann, J. f. O. 1904, p. 549.

Crateropus leucocephalus Butler, Ibis, 1905, p. 330.

[B. coll.] 1 Gallabat May, Kas.; 2 Roseires July Aug. Sept. Dec., 1 Soleil Apl. Sen.

[C. & L. coll.] 2 Kamisa Dec. Sen.

Crateropus tenebrosus.

Crateropus tenebrosus Hartl. Zool. Jahrb. 1887, p. 313, pl. 12: Kudurma, S.E. Bahr el Ghazal.

[Chr. coll.] 1 Mt. Baginzi, Mch. B.G.

This is a very rare Babbler in collections, only some half dozen others being known. Mr. Butler states that it is quite a common bird in the vicinity of Kajo Kaji, in the Lado Enclave.

## Crateropus leucopygius.

Crateropus leucopygius (Rüpp.); Reichw. V. A. iii. p. 115.

Heuglin (Orn. N.O.-Afr. i. p. 391) met with this species at Gallabat on the borders of the Abyssinian highlands.

The examples in the Museum are all from Abyssinia or Eritrea.

### Ptyrticus turdinus.

Ptyrticus turdinus Hartl. J. f. O. 1883, p. 425: Tamaja, Upper Welle distr.; id. Zool. Jahrb. 1887, p. 315, pl. 11; Reichenow, V. A. iii. p. 675.

[Chr. coll.] 2 Yambio Mch., 1 Mt. Baginzi Mch. B.G.

Three examples of this rare bird were secured by Dr. Christy. He mentions that it frequents khor bottoms in parties of half a dozen or so, and makes a loud clucking noise, all the party joining in. The Museum previously possessed only two examples of this species, both collected on the Kibali river, one of the head-waters of the Welle, in July 1906, by Boyd Alexander.

# Family Pycnonotidæ.

## Pycnonotus tricolor minor.

Pycnonotus nigricans var. minor Heugl. Orn. N.O.-Afr. i. p. 398: Upper White Nile.

Pycnonotus tricolor minor (Heugl.); Reichenow, V. A. iii. p. 421; Butler, Ibis, 1908, p. 228, 1909, p. 81.

[B. coll.] 1 Bahr el Ghazal Jan., 1 nr. Tonj Jan., 1 Kojali Feb., 1 Doleiba May, B.G.; 1 Lake No Feb. U.N.;

3 Mongalla July-Sept., 1 Abu Kika May, 1 Kenisa summer, Mon.; 1 Lado Feb. L.E.

[C. & L coll.] 3 nr. Tonga Feb. U.N. [Chr. coll.] 3 Yei Nov. L.E.

Pycnonotus barbatus arsinoë.

Turdus arsinoe Licht. Verz. Doubl. 1823, p. 39: Fayoum. Pycnonotus arsinoë (Licht.); Reichenow, V. A. iii. p. 420; Butler, Ibis, 1905, p. 331, 1909, p. 395.

- [B. coll.] 3 Khartoum Nov. Feb.; 2 Roseires Aug. Sept. Sen.
- [C. & L. coll.] 1 Port Sudan Dec., 3 Erkowit Apl. R.S.; 1 White Nile lat. 12° N. W.N.

The White Nile bird in the Chapman & Lynes collection and one of the Erkowit birds are both nestlings. We can give no further information as to the respective ranges of this species and P. t. minor in the Sudan. The farthest north for the latter species is Kodok (Fashoda), as we are informed by Mr. Butler. The only bird which could give us a clue, one from lat. 12° N. on the White Nile, happens to be a practically complete albino!

We have looked over all the African examples of *Pycno-notus*, and as our conclusions differ slightly from those of Hartert (Nov. Zool. xiii. p. 389) and Zedlitz (J. f. O. 1916, p. 68), we give them for what they are worth.

We prefer to regard the white-vented group as a distinct species, and include under this group P.b. gabonensis with a slight wash of yellow on the vent; but they all form a very compact group spread over northern and western Africa. If this is done the type-species of the yellow-vented group will be P. tricolor. It is also noteworthy that eastern races of P. tricolor have blacker heads than the central and western forms, but this distinction is not sufficiently sharply cut to warrant calling them distinct species.

As pointed out by Hartert the wattle-eyed form *P. nigri*cans occurs side by side with *P. t. layardi*. It also occurs as well with *P. capensis* in certain localities, and we therefore prefer to consider the latter as a distinct species. Closely related to *P. nigricans* come *P. xanthopygos* and *P. x. reichenowi* from Palestine and Arabia: as, however, there is so great a gap in the distribution, we think it advisable to consider these also as forming distinct species.

We have therefore the following species and races in the Ethiopian Region:—

- a. White-vented or with a faint wash of yellow only.
- P. barbatus barbatus (Desf.). Morocco to Tunis.
- P. b. inornatus (Fras.). Senegal to Niger.
- P. b. gabonensis Sharpe. Cameroon to Gaboon.
- P. b. arsinoë Licht. Egypt to Kordofan, Khartoum, and Roseires.
- P. b. schoanus Neum. Eritrea to Shoa.
- P. b. somaliensis Reichw. N. Somaliland.

# b. Yellow-vented, without eye-wattle.

- P. tricolor tricolor Hartl. N. Damaraland to Congo and Uganda; of this we believe P. t. tangangicæ Reichw. and P. t. phæocephalus Mearns are synonyms.
- P. t. layardi Gurney. Eastern South Africa to Nyasaland. We cannot distinguish P. t. pallidus Roberts, though we have not seen the type.
- P. t. ngamii O.-Grant. Lake Ngami distr.
- P. t. micrus Oberholser. Coastlands of German and British E. Africa westwards to Kilimanjaro.
- P. t. fayi Mearns. Highlands of western British E. Africa to Elgon; type locality Fay's farm, 8000 ft. There is a large series of birds which we identify with this form in the British Museum. They are considerably larger than P. t. micrus and are darker on the head than P. t. tricolor from Uganda. Wing-measurements 90 to 100 mm. and over, average about 97 mm. The wing of P. t. micrus averages under 90 mm.
- P. t. minor Heuglin. Upper White Nile.

- c. Yellow-vented, and with a scaly appearance owing to white edging to the feathers of breast and back.
- P. dodsoni Sharpe. S. Somaliland and desert country of British East Africa to Kilimanjaro region. P. spurius Reichw. from Gallaland and P. t. peasei Mearns from Kitunga, B.E.A., are described as being intermediate between this species and P. layardi. We cannot identify these two forms.

# d. Yellow-vented and wattle-eyed.

- P. nigricans nigricans (Vieill.). Cape Colony to Damaraland, Transvaal, and Natal.
- P. nigricans harterti Zedlitz (J. f. O. 1916, p. 71). Benguela. This form has a wattled eyelid, although not so distinct as that in P. n. nigricans, and undoubtedly belongs to this group.
- P. xanthopygos xanthopygos (Hempr. & Ehr.). Sinai and Palestine.
- P. xanthopygos reichenowi Lorenz & Hellm. S. Arabia.
- P. capensis (Linn.). Cape Colony. This species has the colour of the head absolutely uniform with the back, and the whole underside is very much duskier than any other form. It stands therefore rather by itself.

# Phyllastrephus strepitans rufescens.

Phyllastrephus rufescens Hartlaub, Orn. Centralb. 1882, p. 91: Lado district.

[Butler coll.] 2 Rejaf Feb. L.E.

We are unable to distinguish the various forms of *P. strepitans* recognized by Zedlitz, except *P. s. pauper* from Abyssinia, which is markedly more reddish. The others, *P. s. strepitans* from Mombasa, *P. s. sharpei* from Dar-es-Salaam, and *P. capensis suahelicus* from south German East Africa, all seem very similar to our bird; if it is distinct it should be named as above.

Phyllastrephus flavicollis flavigula.

Trichophorus flavigula Cab. Orn. Centralb. 1880, p. 174: Angola.

[B. coll.] 1 Tembura Mch. B.G.

[Chr. coll.] 1 Yambio Mch., 5 Meridi Jan. Feb. B.G.

We very much doubt if this is really *T. flavigula* of Cabanis. We have, however, no specimens from Angola, and as Reichenow states that Angola birds are identical with those from Cameroon, and as our birds are undoubtedly the Cameroon form and not the Uganda form, we are compelled to adopt this name.

The races of this species appear to be-

- 1. P. F. FLAVICOLLIS Swains. Senegal to Togoland. Throat bright yellow, underside very dark brown.
- 2. P. F. FLAVIGULA Cab. Angola to Cameroon and eastwards to Bahr el Ghazal.

Throat very pale yellow, underside greyish brown tinged with yellow, lighter in the middle.

3. P. F. PALLIDIGULA Sharpe. Uganda to Nyasaland and N. Rhodesia.

Throat pale yellow, but not so pale as in last race, underside brown strongly washed with olive and yellow, paler in the middle. X. f. shelleyi Neum. J. f. O. 1900, p. 292, is a synonym.

There are also two birds in the British Museum collection from near Lake Bangweolo which do not agree exactly with this form, but are nearer *P. f. flavigula*, only without the paler centre line along the abdomen.

Phyllastrephus scandens orientalis.

Xenocichla orientalis Hartl. J. f. O. 1883, p. 425: Tomaja, Upper Welle.

[Chr. coll.] 1 Yambio Mch. B.G.

The smaller and paler race of P. scandens to which this bird belongs extends westwards to Cameroon and Northern

Nigeria. P. scandens scandens occurs from Senegal to Southern Nigeria, and, according to Reichenow, to eastern Cameroon and Gaboon. All the Cameroon specimens before us, however, belong to the present easterly race.

We do not know of any previous record of any of these three species of *Phyllastrephus* from within the limits of the Anglo-Egyptian Sudan.

## Family CAMPEPHAGIDÆ.

### Campephaga phœnicea.

Ampelis phænicea Lath. Ind. Orn. i. 1790, p. 367: Africa. Campephaga phænicea (Lath.); Reichw. V. A. ii. p. 521; Butler, Ibis, 1909, p. 81.

[B. coll.] 8 Roseires July-Sept. Sen.; 1 Mongalla Jan., 2 Sheik Tombé summer, Mon.; 1 Lado Feb. L.E.

[Chr. coll.] 5 Yambio Mch., 4 Mt. Baginzi Mch., 1 Meridi Feb., 4 Wau July Aug. B.G.

One of the birds collected by Dr. Christy at Wau is of the yellow-shouldered form (C. xanthornoides Less.). We are satisfied that it is merely a variation and not a species (cf. Neumann, J. f. O. 1916, p. 146).

# Coracina pectoralis.

Graucalus pectoralis Jardine & Selby, Ill. Orn. ii. 1828, pl. 57: Sierra Leone; Butler, Ibis, 1908, p. 225, 1909, p. 80.

Coracina pectoralis (J. & S.); Reichenow, V. A. ii. p. 515.

[B. coll.] 2 Jebel Fazogli May, Sen.; 1 Katta Jan., 1 Raffali Feb., 1 Chak Chak Mch., 2 Wau Jan. Mch. B.G.

[Chr. coll.] 1 Meridi Feb., 11 Mt. Baginzi Mch. B.G.

## Family Muscicapidæ.

## Alseonax gambagæ.

Alseonax gambagæ Alexander, Bull. B. O. C. xii. 1901, p. 11: Gambaga, Gold Coast hinterland.

[C. & L. coll.] 1 Kamisa Dec. Sen.

This bird also occurs in Somaliland (where it was described as *Muscicapa somaliensis* by Bannerman) and in southern Arabia as well as in the Shari country about Lake Chad.

It has not previously been recorded from the Sudan.

### Alseonax aquaticus

Muscicapa aquatica Heuglin, J. f. O. 1864, p. 256: Wau; Butler, Ibis, 1909, p. 83.

Alseonax aquaticus (Heugl.); Reichenow, V. A. ii. p. 456. [B. coll.] 1 Kojali Feb. B.G.

#### Alseonax infulatus.

Muscicapa infulata Hartlaub, P. Z. S. 1880, p. 626: Upper White Nile, probably Magungo or Wadelai.

Alseonax infulatus (Hartl.); Reichenow, V. A. ii. p. 457.

[C. & L. coll.] 1 near Tonga, 3 9½° N. lat., 30-40° E. long. Feb. U.N.

There are examples of this species from Wadelai (*Emin*) and from several places in Uganda in the Museum, but it does not appear to have been previously known from so far north. It is new to the Sudan, and was not met with by Butler. The labels state that it inhabits the papyrus and acts like a Flycatcher.

# Melænornis pammelaina.

Sylvia pammelaina Stanley in Salt's Abyss. App. 1814, p. 59: Abyssinia.

Melænornis pammelaina (Stanley); Reichw. V. A. ii. p. 441.

Melænornis edolioides (Swains.); Butler, Ibis, 1905, p. 340, 1908, p. 236, 1909, p. 83.

[B. coll.] 1 Gallabat May, Kas.; 2 Blue Nile Apl. May, Sen.; 1 Wau Jan., 1 Chak Chak Mch. B.G.; 1 Kajo Kaji Apl. L.E.

[Chr. coll.] 4 Meridi Feb., 3 Yambio Mch. B.G.; 5 Yei Nov. Dec. L.E.

We are inclined to agree with Ogilvie-Grant, Ibis, 1913, p. 638, that Reichenow was right in uniting M. schistacea

Sharpe with this species. We can also find no distinction whatever between these birds and specimens from West Africa (M. edolioides Swainson). Bradyornis diabolicus of Sharpe Cat. Birds, iii 1877, p. 314, was founded partly on adults of this species and partly on immature examples of M. ater.

#### Bradornis griseus.

Bradyornis griseus Reichw. J. f. O. 1882, p. 211: Mgunda Mkali, German E. Africa; id. V. A. ii. p. 438.

[B. coll.] 2 Mongalla Jan. & summer, 1 Shambé Nov. Mon.

Three races of this bird are recognized by Zedlitz (J. f. O. 1915, p. 41). They appear to be only distinguished by size. We find that there is great variation in size in all localities, measurements ranging from 73-85 mm. both in northern Somaliland and in southern British East Africa. B. pumilus Sharpe has already been pointed out to be a synonym by Ogilvie-Grant, Ibis, 1913, p. 632. We can see no justification for recognizing any races.

## Bradornis pallidus pallidus.

Muscicapa pallida Müller, Naumannia, 1851, Heft iv. p. 28: Kordofan.

Bradyornis pallidus subalaris Sharpe, P. Z. S. 1873, p. 713: Mombasa; Grant, Ibis, 1913, p. 633.

Bradyornis pallidus (Müll.); Rothschild, Bull. B. O. C. xxxiii. 1913, p. 65; Butler, Ibis, 1905, p. 340, 1908, p. 236, 1909, p. 83.

- [B. coll.] 3 Roseires Aug. Sen.; 1 Taufikia Apl. U.N.; 1 Pongo river Feb., 2 Chak Chak Feb. Mch., 3 Wau Mch. Apl., 1 Ukanda Jan. B.G.; 1 Bor, 1 Shambé Nov. Mon
- [C. & L. coll.] 5 Kamisa Dec. Sen.; 7 between Sobat river-mouth and Lake No Jan. Feb. Mch. U.N.
- [Chr. coll.] 3 Meridi Jan. Feb., 1 Tembura Apl. B.G.; 2 Yei Nov. L.E.

As was shown by Rothschild, B. p. subalaris is a synonym

of B. pallidus, and a new name is required for the northern race, called by Grant B. pallida. This Rothschild named B. p. sharpei.

With regard to B. granti Bannerman (Bull. B. O. C. xxvii. 1911, p. 84: Gibbe river in south Abyssinia), we find that it is founded on what we believe is the summer plumage of a bird indistinguishable in the winter season from B. pallidus of the Sudan. In the Sudan and the low country the bird does not appear to undergo such a marked seasonal change, though there are distinct traces of it.

Two of the examples from Kamisa collected by Capt. Lynes have a note attached to the ticket stating that they are parent and young and pointing out that the young bird is in the dark plumage of B. granti, and the old bird is passing from the light plumage of B. pallidus to the darker one of B. granti, though neither of them is as dark as the typical Abyssinian birds become in summer.

All the adult so-called B. granti were collected in the summer months.

Whether the stronger seasonal plumage-change of the Abyssinian bird is sufficient to justify its recognition as a separate race we must leave undecided for the present, but we are quite satisfied that the Sudan birds are all the true B. p. pallidus.

Empidornis semipartitus semipartitus.

Muscicapa semipartita Rüppell, N. Wirbelth. 1835, pl. 40: Gondar, Abyssinia.

Empidornis semipartitus (Rüpp.); Reichenow, V. A. ii. p. 447; Butler, Ibis, 1908, p. 237.

- [B. coll.] 1 Amin nr. Meshra el Rek Jan., 4 Gadein Jan. Apl., 1 Gameiza Jan. B.G.; 9 Mongalla July-Sept., 1 Gigging May, 1 Sheik Tombé, Mon.; 2 Lado Feb. L.E.
- [C. & L. coll.] 3 mouth of Sobat river Jan., 1 White Nile 9½° N. 31° E. Feb. U.N.

These birds seem rather small for Neumann's E. s. kavirondensis from Uganda, and although there are no examples 704

in the Museum from Abyssinia or from the Lake districts of Uganda with which to compare them, we believe that they must be identified with the typical race.

### Muscicapa striata striata.

Muscicapa striata striata (Pall.); Hartert, Vög. pal. Faun. p. 475.

M. grisola auct.

[B. coll.] 1 Khor Arbat May, R.S.; 1 Roseires Apl. Sen.; 2 Khartoum Oct.; 1 Shambé Nov. Mon.

[Chr. coll.] 2 Yambio Mch. B.G.; 1 Yei Nov. L.E.

These Spotted Flycatchers appear to belong to the western European race rather than to *M. s. naumanni*, which is said to winter in eastern Africa.

Common and widely distributed on passage, but most birds pass through to farther south (A. L. B.).

### Muscicapa atricapilla semitorquata.

Muscicapa semitorquata E. v. Homeyer, Zeitschr. ges. Orn. ii. 1885, p. 185: Caucasus.

Muscicapa atricapilla semitorquata Hom.; Hartert, Vög. pal. Faun. p. 483.

Muscicapa atricapilla apud Butler, Ibis, 1905, p. 340, 1908, p. 236.

[B. coll.] 1 Khartoum Oct.; 1 Taufikia Apl. U.N.

Both these Flycatchers are females or quite young birds, and appear to us to be referable to the eastern form of the Pied Flycatcher breeding in Asia Minor and Persia, as are other Egyptian examples in the British Museum collection.

## Muscicapa collaris.

Muscicapa collaris Bechst.; Hartert, Vög. pal. Faun. p. 483.

Koenig (Verhandl. V. Intern. Orn. Kongr. 1910, p. 537) reports a single female from Shendi in March. The female of this species is so like that of *M. atricapilla semitorquata* that we cannot admit this bird to the Sudanese list without further confirmation.

Muscicapa parva.

Muscicapa parva Bechst.; Hartert, Vög. pal. Faun. p. 485.

Mr. Butler mentions that, while fishing one day in a stream near Chak Chak in the Bahr el Ghazal, a Redbreasted Flycatcher settled on a stone within a few feet of him. It was in all probability this species, whose winter quarters are at present hardly known.

# Hyliota flavigastra flavigastra.

Hyliota flavigastra Swainson, Birds W. Africa, ii. 1837, p. 47: Senegal; Reichw. V. A. ii. p. 473; Butler, Ibis, 1908, p. 236.

[B. coll.] 1 Moyen, 1 Katta Jan., 1 Pongo R. Mch. B.G.; 1 Kajo Kaji Apl. L.E.

[Chr. coll.] 2 Mt. Baginzi Mch., 1 Wau, B.G.

These specimens appear to be identical with the typical race from West Africa.

## Parisoma plumbeum.

Stenostira plumbea Hartlaub, J. f. O. 1858, p. 41: Casamanze river, Senegal.

Parisoma plumbeum (Hartl.); Reichenow, V. A. iii. p. 521.

[B. coll.] 2 Chak Chak Feb., 1 Katta Jan. B.G.; 1 Abab, 1 Shambé Mch. Mon.; 1 Rejaf Feb. L.E.

[Chr. coll.] Mt. Baginzi Mch. B.G.

This species has a wide distribution from Senegal and the upper White Nile south to the Transvaal. One race, P. p. orientale, is recognized by Reichenow from Brit. E. Africa, and, though we do not find that the distinctions in regard to the white on the tail mentioned by Reichenow are of great value, the birds from Uganda and farther south are certainly rather a deeper bluish grey than those of our series and from southern Abyssinia. The Sudan birds at any rate are identical with the typical race, the type of which is in the British Museum.

Parisoma blanfordi blanfordi.

Sylvia blanfordi Seebohm, P. Z. S. 1878, p. 979: Rairo, Eritrea; Butler, Ibis, 1909, p. 397.

Parisoma blanfordi Reichw. V. A. iii. p. 522.

Sylvia momus (nec H. & E.), Butler, Ibis, 1908, p. 231.

[B. coll.] 3 Erkowit Mch. Apl., 1 Khor Arbat May, R.S.

[C. & L. coll.] 4 Erkowit Apl., 17 Sinkat Mch. R.S.

This large series enables us to settle several vexed questions in regard to this bird. It undoubtedly breeds in the Red Sea Province. With respect to the genus to which this form should be referred, Seebohm made it a Sylvia, from which, however, it differs in having a very long outer primary just under half the length of the second (i. e. averaging 20 and 45 mm.); the second is short as compared with most of the true Sylvias, indeed, it is about equal to the eighth or even shorter.

In these characters our bird agrees with *Parisoma*, but in general coloration it closely resembles *Sylvia*, and in fact it seems to bear the same relation to *Sylvia* that *Calamocichla* does to *Acrocephalus*.

The series before us is undoubtedly identical with the type collected at Rairo by Blanford, but appears to be quite distinct from the Somaliland bird. Hartert has recently (Nov. Zool. xxiv. 1917, p. 459) distinguished the southern Arabian bird.

We find that in most respects the Arabian bird resembles the Sudan bird, being only distinguished by its slightly larger size and slightly darker colour. So close are they that we should not have been inclined to separate them, but, on the other hand, the Somaliland form is obviously distinct, and we would shortly diagnose the three forms as follows:—

Parisoma blanfordi blanfordi Seebohm, supra.

Wing of type 65, of males 67-70, of females 64-67 mm.; back an ashy brown, contrasting rather markedly with the black head and nape.

Distribution. Red Sea coast from Port Sudan to Eritrea.

PARISOMA B. DISTINCTA Hartert, Nov. Zool. xxiv. 1917, p. 459: Gerbe, S. Arabia.

Wing of males 68-70, of females 66-68 mm.; back a little darker brown, not contrasting so strongly with the darker head.

Distribution. S. Arabia.

PARISOMA B. SOMALIENSIS, Subsp. n.

Wing 3 64-67, \$\chi\$ 65 mm. Back distinctly greyer than in either of the two other forms. The tail also is much whiter, the outer web of the outer tail-feather almost completely white, while in the Arabian and typical birds the white forms only a narrow line along the outer edge of the outer web.

Type, a male from Mundara, Somaliland, collected by R. M. Hawker, 9/xi./97. B.M. reg. no. 98/6/13/76.

Chloropeta massaica umbriniceps,

Distribution. Somaliland.

Chloropeta natalensis umbriniceps Neumann, Orn. Monatsb. 1902, p. 10: Omo river; Reichenow V. A. ii. p. 465.

[Chr. coll ] 1 Meridi Feb. B.G.; 1 Yei Nov. L.E.

These birds, though not quite adult, are undoubtedly identical with birds in the Museum from southern Abyssinia, Uganda, and the highlands of British East Africa. Whether they are really distinct from the true *C. massaica* Fisch. & Reichw., the type-locality of which is Kilimanjaro, we cannot say as we have no examples from there with which to compare them.

C. batesi Sharpe (Ibis, 1905, p. 468: Cameroon) appears to be another member of this group of brown-headed forms, which we prefer to keep apart from the C. natalensis group (vide Ibis, 1917, p. 385).

Batis bella chadensis.

Batis chadensis Alexander, Bull. B. O. C. xxi. 1908, p. 105: Lake Chad.

Batis orientalis (nec Heugl.), Butler, Ibis, 1905, p. 341 part, 1908, p. 236, 1909, p. 399.

- [B. coll.] 1 Erkowit, 1 Erba Mch. R.S.; 3 Roseires May, Sept. Sen.; 1 Bahr el Homar Mch. W.N.; 2 Jebel Melbis Apl. Kor.; 1 Chak Chak Feb. B.G.
- [C. & L. coll.] 3 Sinkat Mch., 1 Erkowit Apl. R.S.; 3 Kamisa Dec. Sen.; 2 Jebelein Jan., 1 White Nile 12½ N. lat. Jan. W.N.: 2 Jebel Ahmed Aga Jan. U.N.

Batis bella nyanzæ.

Batis minor nyanzæ Neum. J. f. O. 1907, p. 354: Kun Mtessa, Uganda.

Batis orientalis (nec Heugl.), Butler, Ibis, 1905, p. 341, part, 1909, p. 83.

- [B. coll.] 1 Malakal Apl., 1 Bahr el Zeraf June, U.N.; 5 Mongalla summer; 1 Tonj Jan., 2 Raffali Feb., 1 Wau Mch. B.G.; 1 Kajo Kaji Apl. L.E.
- [C. & L. coll.] 1 nr. Melut Jan., 4 nr. Lake No Feb. Mch. U.N.
- [Chr. coll.] 5 Meridi Feb., 1 Yambio Mch. B.G.; 2 Yei Nov. L.E.

In naming these specimens we found it necessary to examine all the birds of this group from the northern half of Africa, and we found that in most cases we agreed with Neumann's revision of the genus (J. f. O. 1907, pp. 348-358).

He, however, uses the name minor for the group to which the Sudanese forms belong, but we find that Pachyprora bella Elliot, Publ. Field Columb. Mus. Orn. Ser. vol. i. 1897, p. 47: Le Gud, Somaliland, is the oldest name. We have not seen the type, but we have birds from almost exactly the same locality which agree perfectly with the description, and there is no doubt that they are of the same group as B. minor.

There are, therefore, two groups which occur side by side in north-east Africa, B. orientalis Heugl. and B. bella Elliot. Of these B. orientalis can be distinguished at a glance by the lighter brown, much wider, and less sharply

marked off breast-band of the females, and we have no evidence that it has ever occurred in the Sudan.

Three races of B. bella converge in the Sudan—B. b. chadensis Alex. from Lake Chad, B. b. nyanzæ Neum. from Uganda, and B. b. erlangeri Neum. from Abyssinia.

- B. b. chadensis ranges through Kordofan and the northwestern Bahr el Ghazal to the lower White and Blue Niles and on to Port Sudan. It is distinguished by its paler coloration in both sexes on the head and back.
- B. b. nyanzæ ranges north from Uganda to about Malakal on the upper White Nile and through the central and southern Bahr el Ghazal. It may be distinguished from the last race, with which it intergrades, by the darker coloration of the head and back, especially in the males.
- B. b. erlangeri ranges from Abyssinia down the Sobat, Baro, and Blue Nile rivers just into the Sudan, where it intergrades with the other forms. We are not at all certain as to how far it is distinct from B. b. nyanzæ, but as a rule the female appears to lack the reddish tinge or collar on the nape which both the last races possess. We have no examples which we can definitely assert to be of this race, but the birds from Roseires in the Butler collection, which we have placed under B. b. chadensis, are intermediate between that form and the present race.

# Platysteira cyanea nyansæ.

Platysteira cyanea nyanzæ Neum. J. f. O. 1905, p. 210: Bukoba.

[B. coll.] 3 Pitias nr. Rejaf Apl. L.E.

[Chr. coll.] 2 Meridi Jan., 1 Tembura Apl. B.G.

In his revision of the races of this species (J. f. O. 1905, • p. 210) Neumann remarks that P. c. athiopica of Abyssinia, only distinguishable from the present race by its smaller size, occurs on the upper Blue Nile. It may therefore extend into the Sudan. We consider that P. albifrons, from Angola, which he treats as a race of P. cyanea, is entitled to specific rank owing to its very distinct female. Both the present race and P. c. athiopica are distinguished from the typical race of West Africa by the presence of a white frontal band in the female.

### Tchitrea viridis.

Tchitrea viridis (St. Müller); Reichenow, V. A. ii. p. 504. Terpsiphone cristata (Gm.); Butler, Ibis, 1905, p. 341, 1908, p. 237, 1909, p. 83.

[B. coll.] 5 Roseires May, July, Sept.; 1 Jebel Maba Apl. Sen.; 2 Renk Mch. May, 1 Malakal Nov., 3 Bahr el Zeraf June, U.N.; 4 Wau Jan. Apl., 1 Kojali Feb., 5 Tembura Mch. B.G.; 1 Shambé Jan., 3 Mongalla Jan. July, 1 Gigging, 1 Kenisa Jan., 1 Sheik Tombé Jan. Mon.; 1 nr. Rejaf Apl. L.E.

[C. & L. coll.] 3 Kamisa Dec. Sen.; 3 White Nile  $9\frac{1}{9}$  to  $10\frac{3}{4}$  N.L. Jan. Feb. U.N.

[Chr. coll.] 8 Mt. Baginzi Mch., 5 Meridi Jan. Feb., 2 Tembura Apl., 1 Wau, B.G.; 4 Yei Nov. Dec. L.E.

The adult males of Paradise Flycatchers from the Bahr el Ghazal have grey under tail-coverts, and are somewhat more richly coloured with more gloss below. They appear to approach the race T. v. duchaillui Cass. from Gaboon, and there are no wholly white-backed males among this series, though there is one example with the back intermingled black and white. So far as we know T. v. duchaillui is the only race which ever gets a completely black back in the adult.

The birds from the Nile valley proper and Sennar have white under tail-coverts in the adult males, and the red-backed, white-tailed birds, which are the predominant form among the Bahr el Ghazal series, are quite absent, the white-backed, white-tailed adults being abundant. This we take to be identical with the typical West African race (T. v. viridis). They do not resemble the Abyssinian form, T. v. ferreti, which appears to moult straight from the short-tailed young bird into the white adult, whereas in the Sudanese series we have the intermediate long-red-tailed, red-backed stage.

We have examined the large series of Paradise Flycatchers in the British Museum, and although we failed to come to any satisfactory conclusions in regard to definite races, there are some points which may be worth recording.

In South Africa there appear to be two species occurring together, one, T. perspicitlata, with a metallic glossy head, and the other, T. plumbeiceps, without. The latter appears to range westwards to northern Angola, where it merges into, or is replaced by T. melampyra (Hartlaub, Orn. W. Afr. 1857, p. 89: Gaboon = rufocinerea auctorum). The other form, with a glossy head, occurs throughout Africa to southern Arabia, and the oldest name for it is T. viridis St. Müll. In South Africa this bird is always red, and the adult males have long red tails, but as it goes northward white and partially white forms appear. In German East Africa and Uganda the white forms seem to occur, though in the latter country the red form, or often a red form with white shoulders and outer webs to the secondaries, is predominant. In Abyssinia, on the other hand, the adult males apparently always have white backs and long white tails. It seems probable that the same applies to those from northern West Africa (i. e., Gold Coast and Senegambia). In Gaboon and Cameroon, alongside T. melampyra, a form with a whitebacked and white-tailed adult male also occurs, but in this form the white is sometimes partially replaced by black. There seems to be no definite geographical range to any coloured form, but the tendency to white is undoubtedly northern, and the tendency to red southern.

With regard to the plumage changes, we are of the opinion that it takes at least three years for a male to acquire adult plumage, except in the case of the Abyssinian race, T. v. ferreti, where it probably only takes two. Of the forty-seven males from the Sudan before us, fourteen have short red tails and a varying amount of white on the outer webs of the wing-feathers. These we take to be first-year birds. Seven have long red or mixed red and white tails. These we take to be second-year birds. The remaining twenty-six have long white, or black and white, tails. These

we take to be adults. About half of these have pure white backs, and mainly come from the northern part of the country; the remainder have chestnut, or chestnut mixed with deep blue, backs, and mainly come from the southern portion. These latter have a large amount of black in the tail, generally all the feathers except the long central ones being black; but we take this to be a western characteristic, and in no way connected with age. Two birds also from Sennar have short red and white tails, and backs chestnut sprinkled with white. They are probably almost typical T. v. ferreti, which appears to adopt a white plumage direct from the red short-tailed dress of the first year.

### Elminia longicauda teresita.

Elminia teresita Antinori, Cat. Uccelli, 1864, p. 50: Djur, Bahr el Ghazal; Butler, Ibis, 1908, p. 237, 1909, p. 83.

[B. coll.] 2 Tembura Mch. B.G.

· [Chr. coll.] 4 Meridi Feb. B.G.; 4 Yei Nov. Dec. L.E.

On examining the material in the British Museum, we came to the following conclusions as regards the races:—

1. ELMINIA LONGICAUDA LONGICAUDA Swains. Underside darker, more bluish.

Range. Senegal to North Nigeria.

2. Elminia L. Teresita Ant. Underside paler, white on the belly.

Range. Bahr el Ghazal to Cameroon and Uganda; also to Mount Elgon.

3. Elminia L. schwabischi Oustalet, N. Arch. Mus. Paris (3) iv. 1892, p. 216: Franceville, interior of Gaboon.

Of this bird we know nothing beyond the description, which does not appear to distinguish it from E. l. teresita.

4. ELMINIA L. LOANDÆ, subsp. nov.

There are in the Museum five very brightly coloured examples of this group which appear to be quite distinct, and we propose to name them as above.

Nearest E. l. teresita but a much brighter blue above; below, the throat and chest are also bright blue instead of a dull greyish blue as in E. l. teresita. The white of the abdomen is both clearer and more sharply defined. Wing, 64 to 68 mm.

Type, a male collected by W. J. Ansorge at N'Dalla Tando, in northern Angola, 7/viii./1908. B.M. reg. no. 1910/5/6/542.

We regard Elminia albicauda Boc., ranging from Benguella to Nyasaland, as a distinct species.

## Family HIRUNDINIDÆ.

### Delichon urbica urbica.

Hirundo urbica urbica Linn.; Hartert, Vög. pal. Faun. p. 807.

Hirundo urbica Butler, Ibis, 1905, p. 343, 1909, p. 399. [B. coll.] 2 Khartoum Apl.

One of these birds, both of which are males, reaches the quite exceptional wing-measurement of 116 mm.; the other is normal, being 111 mm.

Common on passage in autumn and spring from Khartoum to Lado (A. L. B.).

## Riparia riparia riparia.

Riparia riparia (Linn.); Hartert, Vög. pal. Faun. p. 811.

Cotile riparia (Linn.); Butler, Ibis, 1905, p. 343, 1908, p. 237, 1909, p. 399.

[B. coll.] 1 Khartoum Apl.

Throughout the Sudan in winter (A. L. B.).

## Riparia riparia littoralis.

Cotyle littoralis Heuglin, Orn. N.O.-Afr. i. 1869, p. 166; Dongola.

Riparia riparia littoralis (Heugl.); Hartert, Vög. pal. Faun. p. 812.

Cotile shelleyi Sharpe; Butler, Ibis, 1905, p. 343, 1908, p. 238.

[B. coll.] 2 Khartoum Dec.

[C. & L. coll.] 1 Lat. 15°, 1 Lat. 12½° N. Jan. W.N.; 1 nr. Renk Jan. U.N.

## Riparia paludicola minor.

Cotyle minor Cabanis, Mus. Hein. i. 1850, p. 49: N.E. Africa.

Riparia paludicola minor (Cab.); Hartert, Vög. pal. Faun. p. 813.

[B. coll.] 1 Roseires Sept. Sen.

[C. & L. coll.] 2 Singa Dec. Sen.

The two specimens collected by Chapman and Lynes are both quite immature, but we believe we are right in referring them to this species and not to R. r. littoralis.

## Riparia paludicola sudanensis.

Cotile sudanensis Alexander, Bull. B. O. C. xxi. 1908, p. 88: Bulturi, Lake Chad.

Cotile minor apud Butler, Ibis, 1905, p. 343, 1908, p. 237, 1909, p. 84.

[B. coll.] 2 Raffali, Feb. B.G.

On examining the specimens of R. paludicola in the Museum we have come to the following conclusions as regards the races:—

# 1. RIPARIA PALUDICOLA PALUDICOLA.

Hirundo paludicola Vieill. Nouv. Dict. xiv. 1817, p. 511: S. Africa.

Above uniform brown, also throat and chest; underside white, washed with brown on the flanks. Size large: wing 102-110 mm. Some specimens have the whole underside brown like the chest.

Range. South Africa north to the Zambesi on the east and Benguella on the west.

Riparia pembertoni Hartert, from Angola, is apparently

a distinct species and not a race of R. paludicola. Our Benguella specimens are in every way typical examples of the latter.

### 2. RIPARIA P. DUCIS.

Riparia ducis Reichw. O. M. 1908, p. 81: Ruanda.

? Riparia paludicola dohertyi Hartert, Bull. B. O. C. xxv. 1910, p. 95: Mau, British E. Africa.

? Riparia nigricans Madarász, Ann. Mus. Nat. Hung. 1911, p. 339 : German E. Africa.

Considerably darker, especially on the back and top of the head, than the last race. Size smaller: wing 95-102, average 98 mm.

Range. Central and eastern Africa.

We have no means of knowing whether there is more than one race in these districts, Reichenow's description of *R. ducis* not affording much information to workers who are unable to examine his types.

### 3. RIPARIA P. MINOR.

Cotyle minor Cabanis, Mus. Hein. i. 1850, p. 49: N.E. Africa.

Paler than the last race, very like R. p. paludicola in colour, but the throat and chest paler brown. Size as in last race or slightly larger: wing, average 99 mm.

Range. Abyssinia and upper Blue Nile.

We are inclined to regard Cabanis's name as best applied to the Abyssinian bird, his wing-measurement of  $3\frac{3}{4}$  German inches (= 102 mm.) appearing to belong to an Abyssinian bird.

#### 4. RIPARIA P. SUDANENSIS.

Cotile sudanensis Alexander, Bull. B.O.C. xxi. 1908, p. 88: Lake Chad.

A paler race than the last and slightly smaller, though there are larger specimens in the collection than those mentioned by Alexander. Wing 90-98, average 95 mm.

Range. Lake Chad to the Bahr el Ghazal and White Nile.

Riparia cincta cincta.

Hirundo cincta Bodd. Tabl. Pl. Enl. 1783, p. 45: Cape of Good Hope (ex Daubent.).

Riparia cincta (Bodd.); Reichw. V. A. ii. p. 384.

[B. coll.] 2 Mongalla, summer.

These birds appear to be somewhat intermediate between the typical race of South Africa and R. c. erlangeri Reichw. from Shoa, which only differs in its larger size. The wing-measurements of our birds are 132 and 136 mm. R. c. cincta is stated by Reichenow to measure 126–134 mm., and R. c. erlangeri 135–146 mm.

## Riparia obsoleta.

Cotyle obsoleta Cabanis, Mus. Hein. i. 1850, p. 50: N.E. Africa.

Riparia obsoleta obsoleta (Cab.); Hartert, Vög. pal. Faun. p. 816.

Ptyonoprogne obsoleta (Cab.); Butler, Ibis, 1908, p. 238.

[B. coll.] 1 Erkowit Mch. R.S.

[C. & L. coll.] 2 Sinkat Mch. R.S.

These birds are not as dark as R. pusilla of Zedlitz from Eritrea, or as R. arabica Reichenow from southern Arabia. On the other hand, they are slightly darker than some of the Egyptian birds, and their relations to each other and to the fuligula and rupestris groups are rather obscure. The simplest plan is either to regard R. obsoleta as a distinct species or group them all together as races of R. rupestris. We think the former plan most satisfactory at present, until we know more of their inter-relations.

## Riparia fuligula rufigula.

Cotile rufigula Fischer & Reichenow, J. f. O. 1884, p. 53: Naiwascha, B.E.A.

Riparia rufigula (Fisch. & Reichw.); Reichenow, V. A. ii. p. 400.

[B. coll.] 1 Kajo Kaji Mch. L.E.

This bird does not appear to have been previously obtained

in the Egyptian Sudan; it is known from British East Africa and Uganda across to Lake Chad and Nigeria.

We regard as races of R. fuligula the following:-

- R. f. fuligula (Licht.). Distr. Cape Colony, Natal, and the Transvaal.
- R.f. anderssoni (Sharpe & Wyatt). Distr. S.W. African Protectorate.
- R. f. rufigula (Fisch, & Reichw.). Distr. Tropical Africa as above.
- R. f. pusilla Zedlitz. Distr. Eritrea.

Through the last-named this group is connected with the obsoleta and rupestris groups.

### Riparia rupestris.

Riparia rupestris (Scop.); Hartert, Vög. pal. Faun. p. 815. A single example of the Crag-Martin was obtained by Witherby (Ibis, 1901, p. 259) at Jebel Auli, about 25 miles south of Khartoum on the east bank of the White Nile. There are no Sudanese examples in the British Museum.

## Hirundo rustica rustica.

Chelidon rustica rustica (Linn.); Hartert, Vög. pal. Faun. p. 800.

Hirundo rustica Linn.; Butler, Ibis, 1905, p. 341, 1908, p. 238, 1909, p. 399.

[B. coll.] 1 Khartoum Apl. 12; 1 Mongalla, 1 Kenisa Oct. Mon.; 2 Lado Feb.

[C. & L. coll.] 1 Tonga Mch. 3, U.N.

A common winter visitor to the Sudan. The specimen obtained by Captain Lynes had nearly completed its moult, the tail is still sprouting, and the under parts are washed with pale rufous.

# Hirundo æthiopica.

Hirundo æthiopica Blanford, Ann. & Mag. Nat. Hist. (4) iv. 1869, p. 329: Barakit, Tigré, N. Abyssinia; Reichw. V. A. ii. p. 406; Butler, Ibis, 1905, p. 341, 1908, p. 238, 1909, p. 84.

718

[B. coll.] 1 Gedaref Apl. Kas.; 2 Roseires Aug. Sept. Sen.; 3 Khartoum Mch. May Dec.; 1 Mongalla summer; 2 Meshra el Rek May, B.G.

[C. & L. coll.] 1 Tonga Mch. U.N.

This is the northern representative of *H. albigularis* Strickl. of South Africa. As, however, there are no connecting geographical forms between that species and the present one, and as they are very clearly distinct, we prefer to regard this as a species and not a subspecies.

Widely distributed and resident (A. L. B.).

### Hirundo smithi.

Hirundo smithii Leach, Tuck. Voy. Congo, App. 1818, p. 407: Chisalla Island, Congo; Reichw. V. A. ii. p. 410; Butler, Ibis, 1905, p. 342, 1908, p. 238.

[B. coll.] 4 Roseires Aug. Sept. Sen.; 1 Shendi Feb. Ber.; 1 Mongalla summer; 1 Chak Chak Feb. B.G.

[Chr. coll.] 1 Meridi Feb. B.G.

Hirundo puella unitatis, subsp. nov.

[B. coll.] 3 Kajo Kaji Mch. L.E.

Oberholser has pointed out that the typical race of this Swallow is confined to northern West Africa (Pr. U. S. Nat. Mus. xxviii. 1905, p. 933), and he uses Guérin's H. abyssinica for the race from the rest of Africa. Unfortunately, however, on examining the large series in the British Museum, it at once became evident that the Abyssinian bird is again distinct, and that the best known race inhabiting central, south, east, and west Africa requires another name. H. korthalsi Bp. Consp. i. p. 340 is founded on a bird from an unknown locality. We propose, therefore, the name H. p. unitatis, subsp. n.

Type, a male from Pinetown, Natal, collected 15 October by H. Ayres. B.M. reg. no. 85/9/1/13. Named in honour of the Union of South Africa.

The races then are:—

1. HIRUNDO PUELLA PUELLA Temm. & Schl.

Striping on underside much finer and often with a rufous wash on the sides of the breast. Smaller: wing 95-102 mm. Range. Gold Coast, etc.

2. HIRUNDO P. ABYSSINICA Guér.

Striping very slightly coarser and not thick on the belly, underside very plainly white. Size larger: wing 105-110 mm. Range. Abyssinia.

3. HIRUNDO P. UNITATIS, subsp. n.

Striping very much coarser and more thickly applied, underside as much black as white. Size large: wing 105-115 mm.; wing of type 107 mm.

Range. South Africa north to British East Africa, the Congo, Uganda, and the Lado Enclave.

#### Hirundo domicella.

Hirundo domicella Hartl. & Finsch, Vög. Ostafr. 1870, p. 140: Casamanse, Senegal; Reichw. V. A. ii. p. 420; Butler, Ibis, 1908, p. 239.

[B. coll.] 3 Bor Apl. Oct. Mon.; 2 Bahr el Ghazal Jan.; 1 Lado Feb, 1 Kajo Kaji Mch. L.E.

This bird is the Sudanese and West African representative of H. melanocrissa Rupp. of Abyssinia and of H. daurica Linn. of Asia. As, however, it is quite distinct from those species and no intermediate forms are found, we prefer to keep it as a species.

# Hirundo semirufa gordoni.

Hirundo gordoni Jardine, Contr. Orn. 1851, p 141: Gold Coast; Reichw. V. A. ii. p. 418.

[B. coll.] 1 Gigging May, Mon.; 1 Kajo Kaji Apl. L. E.

# Hirundo senegalensis senegalensis.

Hirundo senegalensis Linn. Syst. Nat. 12th ed. 1766, p. 348: Senegal; Reichw. V. A. ii. p. 415; Butler, Ibis, 1905, p. 342.

[B. coll.] 4 Roseires July Aug. Sen.; 1 Jebel Melbis Apl. Kor.

## Hirundo griseopyga griseopyga.

Hirundo griseopyga Sund.; Reich. V. A. ii. p. 403.

This species is stated by Phillips (Bull. Mus. Comp. Zool. Cambridge, vol. lviii. 1913, p. 16) to have been found breeding by him at Fazogli in January. They make long burrows in hard level ground horizontally a few inches below the surface. It is also reported from Wau in the Bahr el Ghazal by Heuglin (Orn. Nordost-Afr. i. p. 150).

### Hirundo daurica rufula.

Hirundo rufula Temm.; Reichw. V. A. ii. p. 421.

Is also reported by Phillips (op. cit.) from Abiad on the Dinder river in February. It is surprising that this bird has not been met with oftener in the Sudan. Heuglin mentions that A. E. Brehm secured one example in Nubia, and one was collected by Hawker at Fashoda in March, fide O.-Grant.

## Psalidoprocne albiceps.

Psalidoprocne albiceps P. L. Sclater, P. Z. S. 1864, p. 108, pl. 14: Uzinza, G.E.A.; Reichw. V. A. ii. p. 430.

[B. coll.] 6 Kajo Kaji Apl. L.E.

After this portion of our paper was in print, Mr. Robert Gurney, M.B.O.U., most kindly forwarded for our inspection a small collection of birds made by him in the spring of 1914 at or near Meroë on the Nile, a few miles north of Shendi in the Berber Province.

The collection is an interesting one, as there are but few specimens from this neighbourhood in the Butler collection. The passerine birds include an example of *Ploceus v. vitellinus* (see p. 437), a subspecies not represented in the Butler collection, though it occurs apparently throughout the Sudan. There are examples collected by Heuglin in Sennar in the Museum, and it was obtained by Messrs. N. C. Rothschild and Wollaston at Shendi (Ibis, 1902, p. 12). The non-passerine birds will be mentioned in their appropriate places.

### EXPLANATION OF PLATE X.

Fig. 1. Cisticola lugubris marginata. J. Malakal, U.N., 31/v./09. 2. Fashoda, U.N., 9/i./07.

These two figures show the great seasonal change in the coloration and in the length of the tail in this species.

- Fig. 3. Cisticola natalensis malzacii. J. Wandi, L.E. (Emin coll.), 7/ix./85.
  - J. Chak Chak, B.G., 8/iii./07.

The seasonal plumage-change is as marked in this subspecies as in C. l. marginata.

- Fig. 5. Cisticola erythrops erythrops. 3. Ruwenzori, Uganda, 28/iv./06.

  - ,, roseires. J. Roseires, Sen., 19/iv./11. terrestris eximia. J. Bahr el Zeraf, U.N., 4/ii./14.

These figures illustrate the characters of the new subspecies.

- Fig. 8. Cisticola ruficeps scotoptera.
  - Q. Mongalla, summer/09.
  - 9.
    - O. Sennar, vii./09. Type of C. floweri Hartert.]
  - 10.
- Q. Fashoda, 9/i./07.
- 11. d. Roseires, 21/iv./11. ,, ,, ,,

These figures show the successive plumage-changes in this species. Fig. 8 represents the full summer-dress; fig. 9 is the same bird in late summer-dress, the tail has moulted and the new winter tail is not quite fully-grown, the head is also freshly moulted but not the back. Fig. 10 is the full winter-dress with the striped back and the long tail now fully grown; and fig. 11 represents the bird in worn winter-plumage just before assuming the summer-dress.

## XXXIII.—Obituary.

## WILLIAM VINCENT LEGGE.

As was briefly announced in the last number of 'The Ibis,' Col. W. V. Legge, Col.M.B.O.U., died on 25 March last at Cullenswood House, St. Mary's, his home in Tasmania, in his seventy-eighth year.

Born also at Cullenswood in 1840, Legge was the son of Robert Vincent Legge. He was brought to England when a SER. X .- VOL. VI. 3 E



Sclater, William Lutley and Mackworth praed, C1918. "A List of the Birds of the Anglo Egyptian Sudan, based on the Collections of Mr. A. L. Butler, Mr. A. Chapman and Capt. H. Lynes, R.N., and Major Cuthbert Christy, R.A.M.C. (T.F.). Part II\*. Alaudidæ—Hirundinidæ." *Ibis* 6(4), 602–721. https://doi.org/10.1111/j.1474-919x.1918.tb08620.x.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/55021">https://www.biodiversitylibrary.org/item/55021</a>

**DOI:** https://doi.org/10.1111/j.1474-919x.1918.tb08620.x

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/377763">https://www.biodiversitylibrary.org/partpdf/377763</a>

#### **Holding Institution**

Smithsonian Libraries and Archives

#### Sponsored by

**Smithsonian** 

#### **Copyright & Reuse**

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.