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THE

BIRDS OF AFRICA,

COMPRISING ALL THE SPECIES WHICH OCCUR

IN THE

ETHIOPIAN REGION.

 $\mathbf{B} \mathbf{Y}$

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Subfamily III. PLOCEINÆ.

These, the true Weaver-birds, are distinguishable from the Whydahs (Viduinx) and the Waxbills (Estrildinx) by the larger size of the first or bastard primary, which is never so sharply pointed, and, with the exception of *Brachycope anomala*, extends beyond the end of the primary-coverts. The tail, always shorter than the wing, is square or nearly so, the outer feathers never falling short of the end of the tail by so much as the length of the tarsus. More than half of the species have a few hair-like plumes on the nape and hind neck, and about the same proportion hreed in colonies.

Generally, the nest is of a retort form, with a more or less elongated entrance passage hanging down from the side; this passage varying in length from a few inches to eight or even ten feet, and the whole structure of the nest is artistically woven out of grass or vegetable fibres, and is usually firmly suspended between two reeds in marshy places, or from the end twigs of boughs.

KEY TO THE GENERA.

a. Breast with large white twin spots or bars in the females.	
a^1 . Bill metallic blue with the tip orange; sides of chest	
glossy crimson; breast uniform black in the males	Spermospiza,
b^1 . Bill entirely blackish blue; breast cinnamon and	Spermeephater
white, alike in both sexes	Chutospiza
	Orgrospiza
b. No white spots on the breast ; bill never metallic blue.	
c^1 . Nostrils hidden; tail square, with the centre pair of	
feathers slightly the shortest	Sporopipes
d^{1} . Nostrils exposed ; tail more rounded.	
a ² . Bill very deep; culmen extending back in a	
narrow ridge beyond the middle of the eyes;	
males with a basal portion of the primaries	
white, forming a speculum	Ambluospiza
b^2 . Base of upper mandible ends in an angle in front	
of the eyes.	
a^3 . Culmen flattened at the base and sometimes	
swollen.	
a^4 . Bill deeper; culmen more curved; a white	
speculum on the primaries; head, neck and	
breast mostly white; front of wings, upper	
and under tail coverts red	Dinemellia.
b ⁴ . Bill slighter; culmen less curved; no red on	
the plumage.	
[February 1905,	19

PLOCEINÆ

a ⁵ . Nostrils exposed well in front of nasal plumes; plumage blackish, with no rufous	Textor.
b^5 . Nostrils slightly more basal; general	10.2007.
plumage brown and white, with a con-	
siderable amount of rufous on the wings	Histurgops.
b^3 . Culmen rounded at the base.	mistargops.
c^* . Median and greater wing-coverts with whitish	
ends, forming two distinct bars on the wing.	
c^5 . Bill stouter; no hair-like plumes on the	
back of head and neck; a broad pale eye-	
brow or the rump white or nearly so	Plocepasser.
d^{5} . Bill more slender; some hair-like plumes	1 1000 passer.
on the back of head and neck	Sharpia.
d^4 . With no whitish bars on the wing.	Snarpia
e^5 . Bill red or yellow; abdomen white; quills	
broadly margined with red or yellow .	Anaplactas
f^5 . Bill neither red nor yellow.	mapieces.
a^{6} . Wings and tail uniform black or nearly	
so (excepting in females of <i>Cinnamop</i> -	
teryx castaneofusea and Melanopteryx	
nigerrima).	
a^7 . Some red on the plumage.	Malimbus
b^7 . No red on the plumage.	mannous.
a^{s} . Yellow, when present, confined to	
the interscapular region.	
a^{9} . Interscapular region chestnut or	
yellow.	Cinnamopteryx.
b^{9} . General plumage black in adult	e thhantopter ga.
males.	Mclanopteryx.
b^{*} Yellow always present and uot con-	notanopior ga.
fined to the mautle.	
c^{9} . Bill grey, with a distinct horny	
membrane overhanging the nos-	
trils; under parts yellow; upper	
parts uniform, back black, brown,	
or grey; plumage of sexes alike	Sycobrotus.
d ⁹ . Bill black in adults; some yellow	
on the upper parts; plumage of	
sexes not alike.	Heterhyphantes.
b^6 . Wing and tail never uniform black, nor	51
nearly so.	
c^{7} . With black on throat in full plumaged	
males, which have also sides of head	
or a band through the eye black.	

PLOCEINÆ

c^{s} . Bill more slender; throat not black	
in the females.	
e^9 . Tail more than half the length	
of the wing; first primary reach-	
ing beyond the end of the under	
wing-coverts.	
a^{10} . Sexes, with the exception of	
the throat, similar; back and	
closed wings uniform green-	
ish; bill slender	Hyphanturgus.
b^{10} . Females with no black on the	51
head; males with black on	
sides of head, never confined	
to a band through the eye.	
a^{11} . Bill more slender	Sitagra.
b^{11} . Bill stouter	Hyphantornis.
f^9 . Tail only half the length of wing;	rrgpmanoormos.
first primary falls short of the end	
of under wing-coverts	Brachucone
d^{*} . Bill extremely stout ; both sexes, in	Drachgeope.
full plumage, have the sides of head	
and the upper throat black; crown	
yellow in males, black in females	Dashunhantas
d^7 . No black on throat in either sex.	1. aenypnanies,
e ⁸ . Ear-coverts or sides of head black	
in full plumaged males.	
g ⁹ . Abdomen and under tail-coverts clear yellow or white.	Othumbantas
	Oungphanies.
h^9 . Abdomen grey ; under tail-coverts	Nclicurvius.
	INCUCUTOUUS.
i^8 . Ear-coverts or sides of head never	
black.	
i ⁹ . Abdomen and under tail-coverts	
clear yellow or white; tail	V
slightly more rounded	Aantnophilus.
k^9 . Abdomen and under tail-coverts	
never clear yellow nor white.	
c10. Abdomen and under tail-	
coverts white brown; bill	DI
stouter	Ploceus.
d^{10} . Abdomen red or pale ashy	77 11
olive; nostrils more basal .	Foudia.

SPERMOSPIZA

Genus I. SPERMOSPIZA.

Bill very stout, deeper than broad, dark metallic blue, with the tip, and sometimes the edges of the mandible, red; culmen rounded and slightly curved; keel with an upward curve; cutting edges of mandibles slightly festooned; base of bill forming an acute angle on the forehead. Nostrils basal and hidden by the frontal feathers. Wing rounded; primaries 5 and 6 longest, two shorter than 10, 1 more than half of 2. Tenth quill falls short of tip of wing by about one-third of the length of the tarsus. Tail rounded. Tarsus moderate; toes rather slender. A few hair-like plumes on the back of the head and hind neck. Sexes differ in plumage, mostly in the colouring of the breast, which in males is uniform black, where, in the females, it is blackish, boldly spotted or barred with white.

Type.

Spermophaga (non Schönh, 1833), Swains. Classif. B. ii.

KEY TO THE SPECIES.

a. Head	not e	entirel	v red	ι.
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 a¹. Bill only tipped with orange red; upper tail coverts not of the same bright crimson as the throat. a². Upper tail-coverts and abdomen black	hæmatina, 3, ad. 2
or barred with white	hæmatina, g. ₇₃
c ² . Abdomen black	guttata, ♀

Spermospiza hæmatina.

Loxia hæmatina, Vieill. Ois. Chant. p. 102, pl. 67 (1805) Africa.
Spernospiza hæmatina, Sharpe, Cat. B. M. xiii, p. 498 (1890); Shelley, B. Afr. I. No. 448 (1896); Nehrkorn, Kat. Eiers. p. 131 (1899) egg; Reichen. J. f. O. 1902, p. 36 Togo; id. Vög. Afr. iii, p. 101 (1904).
Spermophaga cyanorhynchus, Swains. B. W. Afr. i. p. 164 (1837) Senegal.
Spermospiza guttata (non Vieill.), Reichen. J. f. O. 1902, p. 36 Togo.

Adult male. Jet black, with the chin, throat, front and sides of body bright glossy crimson. Iris crimson; eyelids dull white; bill metallic blue, changing into crimson at the end; tarsi and feet brownish black. Total length 5 inches, culmen 0.7, wing 2.7, tail 2.2, tarsus 0.85. Fantee (Ussher).

Adult female. Upper parts dark slaty grey; forehead, sides of head and the upper tail-coverts dull dark crimson; chin, throat, front and sides of breast glossy crimson; remainder of the under parts dark slaty grey, and, with the exception of the thigh, the feathers have white bars and terminal twin spots; these spots apparently gradually develop into bars. Wing 2.6. \wp , 5. 3. 72. Connor's Hill (Shelley).

Immature. Dark slaty grey; upper tail-coverts and broad edges to the feathers of the throat dull dark crimson. In another young hird the throat is mostly bright crimson, and the feathers of the centre of the chest have rounded white spots.

The Guinea Blue-billed Weaver ranges from Senegambia to Abeokuta.

From Senegal Swainson received a male and female, the types of his *Spermophaga cyanorhynchus*. The generic name having been previously used for *Colioptera* by Schönherr in 1833, was changed into *Spermospiza* by Gray in 1840. Vieillot (Ois, Chant. pls. 67, 68) was the first to name this species and its near ally *S. guttata*, and in his illustrations of these birds he did not overlook the characteristic colouring of their bills and upper tail-coverts, as has been done by some more recent ornithologists.

Verreaux received the species from Casamanse, and Brogden met with it at Sierra Leone; here Mr. Kemp procured specimens from March to October at Rotifunk, Jagbamah and Bo, and writes: "It frequents the farms and marshy ground like *Pyrenestes coccineus*, is very wary and as difficult to see as that bird, and like that species apparently breed here in August and September." Dr. Büttikofer found its nest in Liberia and remarks that it does not breed in colonies. The nest was placed in the fork of a bush, some four feet from the ground, in the undergrowth of the forest, and was spherical in form, about five inches in diameter, with the entrance near the top, and was constructed of soft grass without any lining, and contained two white eggs, measuring 0.76×0.52 . He remarks that in one of his male specimens the upper tail-coverts were broadly edged with red; probably this was the remains of the immature plumage, for it appears to me that both sexes, when young, have the same amount of dull red on the upper tailcoverts; but unfortunately the sex has not been recorded of any of the immature birds I have examined.

The species is fairly distributed throughout Liberia and the Gold Coast, and is represented in the British Museum from Sierra Leone, Ashantee, Wassaw, Denkera Forest, Cape Coast, Accra and Abeokuta, but as it lives in pairs in the thick bush and forest country, is only occasionally seen. On the Gold Coast, in March, Buckley and I found them frequenting the dense bush, appearing at times singly or in pairs on the narrow footpaths. At Abouri Drs. Reichenow and Lühder met with a hen bird, attended by her young, in September. Mr. Boyd Alexander procured the species at Prahsu, Dr. Büttner at Bismarckburg, in April, and Mr. Baumaun at the Misahöhe station in February and May. The most eastern range known to me for the species is Abeokuta, where it has been procured by Mr. Robin.

Spermospiza guttata.

Loxia guttata, Vieill. Ois. Chant. p. 103, pl. 68 (1805) Congo.

- Spermospiza guttata, Sharpe, Cat. B. M. xiii. p. 500 (1890); Kuschel, J. f. O. 1895, p. 336 egg; Shelley, B. Afr. I. No. 449 (1896); Reichen-
 - Vög. Afr. iii. p. 102 (1904).
- "Fringilla pustulata, Voigt," Cuv. Thierr. i. p. 581 (1831).

Spermospiza immaculosa, Reichen. J. f. O. 1877, p. 29 Loango.

Adult male. Similar to that of S. hæmatina, from which it differs in the upper tail-coverts being of the same bright glossy crimson as the throat; the sides of the head, below the eye, bright crimson, or washed with that colour, and also in the upper mandible having broad orange red edges. "Iris red; eyelids white; feet black, with the soles yellow." Total length

5.4 inches, culmen 0.7, wing 2.8, tail 2.2, tarsus 0.9. \mathcal{J} , 15. 6. 01. Efulen (G. L. Bates).

Adult female. Similar to that of S. hæmatina, from which it differs in the absence of red on the front of the crown; in the red of the upper tailcoverts and sides of the head being of the same glossy bright erimson as the throat; tail-feathers slightly edged with dull crimson. "Iris red; eyelids white; bill dark metallic blue, with red edges; feet black, with the soles yellow" (Reichenow).

The Gaboon Blue-billed Weaver ranges from Camaroons to the Congo.

According to Dr. Reichenow the species is abundant in Camaroons. Near the coast, at Bibundi, Mr. Sjöstedt met with it singly or in pairs amongst the thick grass interspersed with bushes and stunted trees, on the summits of which it would perch, but never saw it frequenting the higher trees. Mr. G. L. Bates, who procured two full plumaged males in the middle of June at Efulen, writes: "All the Weaver Finches that I have seen are confined to the clearings, unless it be the black red-breasted 'Edumvin' (*Spermospiza guttata*), which I have seen building in high trees in the forest." He has also procured specimens at the Ja River and at the Rio Beneto in French Congo.

In Gaboon it has been met with by Du Chaillu at the Moonda and Camma Rivers, and by Marche in the Ogowé district. On the Loango Coast Falkenstein obtained the type of *Spermospiza immaculosa*, an adult male; and Lucan and Petit both collected specimens at Landana. The type of Vieillot's *Loxia gutturalis*, an adult female, was discovered by Perrein at the Congo, and the species is not known from further south than the course of that river; but has been procured by Bohndorff at Kibongo, to the south of Stanley Falls, and by Jameson at Yambuya on the Aruwimi branch.

Spermospiza rubricapilla.

Spermospiza rubricapilla, Shelley, P. Z. S. 1888, p. 30 *Bellima*; Sharpe, Cat. B. M. xiii. p. 500, pl. 15 (1890); Shelley, B. Afr. I. No. 450 (1896); Reichen. Vög. Afr. iii. p. 103 (1904).

Type. Entire head, front of neck and sides of chest bright glossy crimson; remainder of plumage mostly dark slaty grey, with the upper tail-coverts dull dark crimson; upper breast with white spots towards the flanks, and barred with white down the centre as well as on the abdomen and under tail-coverts. "Iris brown; bill indigo blue, with orange brown edges to the mandibles; feet olive black" (Jackson). Total length 6.3 inches, culmen 0.7, wing 2.8, tail 2.5, tarsus 0.9. 9, 15.7.83. Bellima (Emin).

The Red-headed Blue-bill inhabits Central Equatorial Africa.

The species is known to me by two female specimens only: the type, which was forwarded to the British Museum by the late Emin Pasha, was procured at Bellima in the Bongo country of the Upper Gazelle River district, and the other specimen was obtained in the Nandi highlands on the Equator, in about 35° E. long., at an elevation of 6,500 feet, by Mr. Jackson, who writes: "First one seen; it was in a thick bush in the belt of forest." The colouring of the eyes, bill and feet, as mentioned by Mr. Jackson, are similar to those recorded by Dr. Reichenow as occurring in immature specimens of *S. guttata*.

Genus II. CLYTOSPIZA.

Similar to Spermospiza in most of its characters, but differing in the bill being proportiouately longer and more slender and entirely uniform blackish blue. Sexes alike in the colouring of the breast, which is cinnamon and white, in bold spots or bars, but distinguishable by the colouring of the throat, which is uniform grey in immature birds, has a red mark in the males, and a white one in the females.

Type. Clytospiza, Shelley, B. Afr. I. p. 32 (1896) C. monteiri. The genus is confined to Tropical Africa, and is represented by a single species.

Clytospiza monteiri.

Pytelia monteiri, Hartl. P. Z. S. 1860, p. 111, pl. 161 Bembe.

Clytospiza monteiri, Shelley, B. Afr. I. No. 451 (1896).

Lagonosticta monteiri, Sharpe, Cat. B. M. xiii. p. 273 (1890).

Pitylia stictilæma, Reichen. J. f. O. 1887, p. 213 Leopoldville.

Hypargos monteiri, Reichen. Vög. Afr. iii. p. 158 (1904).

Adult male, type. Entire head and the neck dark grey, with a vermilion stripe down the lower half of the throat; back and wings browner; rump and upper tail-coverts glossy crimson; tail uniform brownish black; under surface of the quills dusky brown, with paler and more sandy buff inner edges; under wing-coverts buff, barred with pale cinnamon; crop and breast deeper cinnamon, with large round twin-spots, which meet and form bars on the middle and lower breast; under tail-coverts dusky brown, banded with white. "Iris brown; bill blackish; tarsi and feet reddish" (Emin). Total length 4:6 inches, culmen 0.5, wing 2:25, tail 2:0, tarsus 0:65. Bembe (Monteiro).

Adult female. Differs only in having a band from the chin down the centre of the throat white, tinted with rufous towards the crop. Wing 2.25. 9, 11. 11. 82. Kudurma (Emin).

Immature. Entire throat dark grey; only a few spots on the crop and fore-chest, remainder of breast barred ciunamon and white. 3, juv. 1. 11. 85, Foda (Emin).

Monteiro's Weaver ranges from the Wadelai district of the Upper White Nile into Camaroons and Angola.

In the British Museum there are four of Emin's species from Foda and Tangimoro, near Wadelai and westward from Kudurma and Tangasi. Its occurrence in Camaroons was first made known by Dr. Zenker, who found it frequenting the grassy country interspersed with trees near Jaunde.

Falkenstein met with the species in Loango at Chinchonxo, and Lucan and Petit at Landana; some hundred miles distant from Leopoldsville, where the type of *Pytelia stictilæma* was procured by Bohndorff, who also obtained the species further up the Congo at Kassongo.

The type, an adult male, was discovered by Mr. Monteiro at Bembe in Angola, where he was informed by the natives that these Weavers live in flocks.

SPOROPIPES

Genus III. SPOROPIPES.

Bill as deep as broad at the nostrils, swollen at the base, and much compressed towards the end; culmen rounded and curved; cutting edges nearly straight and smooth; keel slightly curved. Nostrils basal and hidden by the frontal plumes. Primaries 2, 3, 4 and 5 longest and nearly equal, 1 about one-third of 2. Tail square, the centre pair of feathers slightly the shortest. Tarsi and feet moderate; claws rather short. Sexes alike in plumage, mostly brown and white, with no red or yellow.

Type.

Sporopipes, Cab. Arch. Naturg. xiii. p. 332 (1847) . . S. squamifrons. Pholidocoma, Reichenb. Av. Syst. pl. 76 (1850) . . . S. squamifrons. The genus is confined to Tropical and South Africa, and comprises two well-marked species.

KEY TO THE SPECIES.

Sporopipes squamifrons.

Estrelda squamifrons, Smith, Rep. Exped. C. Afr. 1836, p. 49 S. Africa.
Sporopipes squamifrons, Sharpe, Cat. B. M. xiii. p. 407 (1890); Shelley,
B. Afr. I. No. 452 (1896); Nebrkorn, Kat. Eiers. p. 128 (1899) egg;
Whitehead, Ibis, 1903 Orange River; Reichen. Vög. Afr. iii. p. 16 (1904); Clarke, Ibis, 1904, p. 524 Natal.

Amadina squamifrons, Smith, Ill. Zool. S. Afr. Aves, pl. 95 (1844).

Fringilla lepidoptera, Licht. Verz. Kaffernl. p. 15 (1842).

Adult male. Upper parts ashy brown; forehead and front of crown nearly black, with sharply defined narrow whitish edges, giving this part a scale-like appearance; tail, wing-coverts and secondaries blackish brown, with sharply defined whitish edges; remainder of quills browner, with narrower brownish buff margins; under surface of wings ashy brown, with paler inner edges to the quills, and the under coverts ashy white; front half of sides of head black; car-coverts and sides of neck ashy brown like the mantle; cheeks and throat white, with the chin and two strongly marked diverging bands jet black; breast, thighs and under tail-coverts buff. "Iris red; bill pink; ridge and tip darker; tarsi and feet pale brown." Total length 4.2 inches, culmen 0.4, wing 2.3, tail 1.8, tarsus 0.65. \mathcal{J} , 5. 1.83. Rustenburg (T. Ayres).

Adult female. Like the male. "Iris hazel; bill bright pale rose pink, paler on the under mandible; tarsi and feet pale brown." Wing $2\cdot 2$. \circ , 15.9.79. Potchefstroom (T. Ayres).

The Scaly-fronted Weaver ranges over Southern Africa to the south of the Quanza and Zambesi Rivers.

Regarding its most northern known range Mr. Monteiro writes: "Gregarious in small flocks. Only observed in the rocky, barren districts to the south of Benguela. Upwards of a dozen were caught for me by the blacks, one night, in a hole in the straw thatch of a hut, where they are fond of roosting together, and I had them alive many months in a cage, feeding on grass and other small seeds." Auchieta met it in the Humbe district.

According to Andersson : "This species is widely and commonly diffused over the middle and southern portion of Damaraland; it is also pretty common in Great Namaqualand. in the Lake region, and at the River Okavango. It is a gregarious species, and is comparatively tame, often taking up its abode close to man. It feeds on grass-seeds and insects, which it chiefly seeks on the ground amongst the grass, resorting in small flocks to open localities thinly covered with dwarf vegetation. This Finch is a very late breeder, and builds a large grass nest, which is usually placed in 'hakisdom' bushes, and has the appearance externally of a bundle of grass accidentally pitched into a bush or tree, the entrance to the nest being nearly hidden by the manner in which the grass is arranged. Internally the nest is beautifully lined or, rather, padded with the softest materials, and especially with the feathers of the Guinea-fowl, and not only serves for the purpose of incubation but also as a roosting-place in the cold season, when several individuals, probably of the same brood, may be found thus snugly housed."

Regarding its habits, Stark writes: "These pretty little

SPOROPIPES FRONTALIS

Weaver-birds are very abundant on the banks of the Orange River, in small flocks among the bushes and mimosa trees that fringe the banks of the river. Although they perch freely on bushes, they appear to obtain all their food, consisting of grassseeds and small insects, from the ground. They are active and vivacious little birds of quarrelsome dispositions and somewhat noisy when feeding, as they keep up a constant bickering with one another. They are very tame and fearless, frequenting the houses and kraals to feed among the ponltry and Sparrows."

Major Clarke found the species abundant in small flocks frequenting the bush near the Modder River. At the Orange River, it is, according to Lieut. Whitehead, very common in flocks, when not nesting, and to be seen "generally amongst the heath or in the bush. Nests of this bird were found in March. They were untidy and conspicuous structures, placed about six or seven feet above the ground." According to Stark: "On the Orange River these Weavers build in March and April, on the Limpopo in June and July. The eggs, four or five in number, vary in shape and colour; the ground colour is pale blue green, this is thickly marked with blotches and scrawls of brown and rufous. The eggs measure about 0.65×0.48 ."

The species is represented in the British Museum by the type from Latakoo, and another of Sir Andrew Smith's specimens from Kroonstad, also from Eland's Post (Atmore), Rustenburg (T. Ayres), Potchefstroom and Bamangwato (T. E. Buckley), Somoque River (Oates), and Palatswe Pan in Matabele (Jameson).

Sporopipes frontalis.

Loxia frontalis, Daud. Traité, ii. p. 445 (1800).

Sporopipes frontalis, Sharpe, Cat. B. M. xiii. p. 409 (1890); Shelley, B. Afr. I. No. 453 (1896); Nehrkorn, Kat. Eiers. p. 128, pl. 3, fig. 35 (1899) egg; Reichen. Vög. Afr. iii. p. 17 (1904).

Sporopipes frontalis emini, Neum. J. f. O. 1900, p. 283 Ugogo.

Le Sénégali à front pointillé, Vieill. Ois. Chant. p. 39, pl. 16 (1805).

Adults. Forehead and front of crown black, spotted with tiny white tips to the feathers; remainder of crown, back and sides of neck pale cinnamon, with lanceolate black centres to the feathers of the hinder crown; back and lesser wing-coverts ashy brown; remainder of the wings and the tail rather darker brown, with brownish buff edges to the median and greater coverts, inner secondaries and the feathers of the tail; primary coverts and the primaries nearly uniform; inner edges of quills and the under wingcoverts brownish white; sides of head very pale ashy brown, the hinder part bordered by the pale cinnamon of the upper neck; a moustachial baud of black, spotted with tiny white tips to the feathers; under parts white, inted with ashy brown on the crop, front and sides of the breast. "I ris brown; bill and feet pale yellowish born-colour'' (Heuglin). Total length 4.5 inches, culmen 0.45, wing 2.5, tail 1.8, tarsus 0.65. \mathcal{J} , 2.7.80, and \mathcal{G} , 26. 6.80. Redjaf (Emin).

Immature. Similar to the adult, from which it differs in the entire absence of white tips to the black feathers of the head, and in the broad pale edges of the wings and tail-feathers being more rufous buff.

The Speckled-fronted Weaver ranges from Senegambia into Abyssinia, and southward into Ugogo.

The type of the species came from Senegambia, and specimens have been procured by Verreaux from Casamanse and by Beaudouin from Bissao.

According to Henglin these Weavers are abundant in North-east Africa to as far north as 17° N. lat., and in the warmer parts of the Abyssinian coast. They were beginning to breed in Bogos in September, and he found the young able to fly when he visited Kordofan in November. The nest is large and oval, generally placed in the centre of a most impenetrable thorn-bush. It is constructed of dry grass, with a small centre chamber well lined with feathers, hair, roots and wool. During the breeding season they live in pairs, and frequent the open country where there are trees for them to nest in, but as autumn sets in they assemble in large flocks, which alight like Sparrows on the roofs of houses or in the stubble-fields and pasture-land, and retire to roost in the high

AMBLYOSPIZA

trees near water. Their call-note is a chirp, but their song, though weak, resembles that of our Goldfinch. The eggs, according to Emin, are of a greyish green colour, with darker lengthened blotches, which blotches, Mr. Kuschel informs us, sometimes spread over the whole surface and give them a uniform appearance; they measure on an average 0.64×0.48 .

In the British Museum there are three specimens collected at Rediaf by Emin, who also met with the species at Lado, but considered it uncommon there. Mr. Jackson obtained a male and female at Elgevn in July, and writes : "Found breeding in an acacia. Makes a large nest of dry grass, not unlike that of our common Sparrow." At Kadem, in Kavirondo, Mr. Oscar Neumann procured a male in March, and remarks that it, and the birds he has examined from Kordofan, agree perfectly in colouring, but that the specimens collected in Ugogo, by Emin at Msanga, and by Böhm at Mounwi, represent a southern subspecies, which he names S. frontalis emini. This form he characterises by its much paler neck-band and obscure white edges to the black feathers of the back of the head. I have not seen a specimen from the Ugogo district, but Dr. Reichenow does not admit a southern subspecies of S. frontalis, and he must have compared the types of S. frontalis emini, as they are in the Berlin Museum.

Genus IV. AMBLYOSPIZA.

Bill, Grosbeak-like, very stout, deeper than broad, compressed at the sides, and grooved on each side of the culmenal ridge, which extends back beyond the centre of the eyes; cumlen and tarsus equal in length; chinangle very broad and square; nasal orifices exposed. Primaries 3, 4 and 5 longest, 1 (about 1 inch) one-third of the longest. Tail rounded, nearly square. Tarsi and feet moderate; claws rather long. A few hair-like plumes on the back of head and hind neck. Sexes dissimilar; males with a white speculum, formed by the base of the primaries, and with a white forehead in adult; females with the breast striped. No red or yellow on the plumage.

AMBLYOSPIZA ALBIFRONS

albifrons, J , ad.

unicolor, 3, ad.

melanota, 3, ad.

	Amblyospiza, Sundev. Œfv. K. Ak. Forh. Stockh. April,	
	1850, p. 98	A. albifrons
	Coryphegnathus, Reichenb. Syst. Av. pl. 79, fig. 6 (June,	
	1850)	A. albifrons
	The genus is confined to Tropical and South Africa, and co	omprises fou
e	ecies, three of which are very near allies. It is well ma	arked by the

species, three of which are very near allies. It is well marked by the powerful bill, but especially by the culmen extending abnormally far back, and also by the white speculum on the primaries. This latter character, however, also occurs in *Dinemellia*, and both these genera have the bill, from in front of the frontal feather, somewhat similarly shaped; they, however, differ greatly in their breeding habits. The *Amblyospiza* construct neatly woven nests in reed-beds, and the *Dinemellia* place theirs in thorntrees, and protect them with a surrounding of thorny boughs, giving them the outward appearance of Magpies' nests.

a. A clear white patch at base of primaries Males. a¹. Forehead white.

- a². Head and neck not mostly cinnamon.
 - a³. Head and neck mostly rufous shaded dark brown
- b³. Head and neck mostly blackish
- b². Head and neck mostly cinnamon.
 c³. Breast blacker ; white frontal patch not extend-
- ing back beyond the base of the culmen \ldots d^3 . Breast ashy grey; white frontal patch much

Amblyospiza albifrons.

Pyrrhula albifrons, Vigors, P. Z. S. 1831, p. 92 Algoa Bay.

Amblyospiza albifrons, Sharpe, Cat. B. M. xiii. p. 501 (1890); Shelley,
 Ibis, 1893, p. 25; 1894, pp. 20, 470; 1898, p. 554 Nyasa; id. B.
 Afr. I. No. 454 (1896); Shortridge, Ibis, 1904, p. 177 Pondoland;
 Reichen. Vög. Afr. iii. p. 98 (1904).

Pyrrhula frontalis, Swains. An. in Menag. p. 319 (1838).

Pyrenestes frontalis, Smith, Ill. Zool. S. Afr. Aves, pls. 61, 62 (1840).

Coryphegnathus schiffi, Bp. Consp. i. p. 451 (1850) juv.

Adult male. Forehead white, remainder of the head, neck and mantle, deep chocolate brown, shading almost into black on the wings, lower back and tail; basal portion of the quills white, forming a well-marked speculum on the primaries; feathers of the back, upper tail-coverts and wings,

generally, with very narrow brownish buff edges; under surface of wings uniform blackish brown, with a broad white band across the base of the quills. The brown throat shades into deep slaty grey on the breast, thighs and under tail-coverts; the feathers of these parts have obsolete dark shaftstripes, and whitish edges, broadest and most distinct on the under tailcoverts. "Iris brown; bill grey; the base of the upper mandible black; tarsi and feet reddish brown" (Stark). Total length 7.3 inches, culmen 1.0, wing 3.9, tail 3.0, tarsus 1.0. 3, 16. 10. 75. Pinetown (T. L. Ayres).

Adult female. Upper parts dark brown, with sandy brown edges to the feathers; tail uniform brown, with obsolete white terminal margins to the feathers; wings, with the lesser coverts like the back; remainder of the coverts and the secondaries edged with rufous brown; ends of the median and greater coverts and the base of the outer webs of some of the primaries buff; under surface of wing with the bastard-primary and end half brown, and the base of the other quill as well as the coverts white; sides of head rufous brown; under parts white, with dark brown centres to the feathers, inclining to stripes on the body. Wing 3.4. 2, 28.7.75. Durban (T. L. Ayres).

The Southern Grosbeak-Weaver ranges over the eastern half of South Africa, from Cape Colony to Lake Nyasa.

Its most western range is the eastern part of Cape Colony, where the type was discovered, inland from Algoa Bay, by Henry Ellis. It has also been met with in this colony by Rickard at East London, by Colonel Trevelyan near Kingwilliamstown, and by Sir Andrew Smith, who writes: "The only specimens which have been obtained within the limits of the Cape Colony were discovered in the forests upon the eastern frontier. About Port Natal, however, the bird is not so rare, and specimens are readily to be obtained there at all seasons of the year. It feeds principally upon berries and small fruits."

Stark writes: "I have myself only met with this Weaverbird on the coast of Natal and Zululand, among the tall reeds that border many of the rivers and lagoons. In many such localities it is quite abundant, outnumbering any other species of the family. This species builds among the reeds and, its

AMBLYOSPIZA ALBIFRONS

thick and clumsy-looking bill notwithstanding, constructs a very neat and beautiful nest, shaped something like a flattened cone with the entrance at the lower edge. This is attached to the stems of two reeds over the water. It is woven with long pieces of coarse grass and strips of reed-leaf without any finer lining. Both birds labour at its construction, the male fetching the materials and working from the outside, whilst the female works from the inside. Both male and female keep up an incessant chattering as they pass the end of the grass stem from one to the other through the walls of the nest. These Weavers nest in colonies, and like many other species of the family, become very tame during the breeding season, so that one can easily watch them from a distance of a few yards only. Although these birds feed largely upon berries and large forest seeds, they also take insects, especially beetles and termites, as well as locusts. The newly hatched young are fed on soft larvæ and the pulp of berries." The egg is described by Mr. Kuschel as perfectly oval, without gloss, of a reddish white colour, with ashy violet and brownish red spots, and measuring $1.0 \times 0.64.$

The species is represented in the British Museum by seventeen specimens from Natal, three from the Transvaal, and five from Nyasaland. The Messrs. Woodward met with it in Zululand at the Lower Umfulosi River and at Eschowe. It is apparently rare in the country between Natal and the Zambesi, from whence I find it mentioned by Mr. Barratt who writes : "I shot this bird at Macamac Goldfields, but have never received it from anywhere else." To the north of the Zambesi specimens have been collected at Zomba, Fort Lister and the Mılanji Plains in July, August and September, by Mr. Whyte, and at Nkata on the western coast of Lake Nyasa by Sir Alfred Sharpe.

(February, 1905.

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AMBLYOSPIZA UNICOLOR

Amblyospiza unicolor.

Pyrenestes unicolor, Fisch. and Reichen. Orn. Centralb. 1878, p. 88; id. J. f. O. 1878, p. 354 Zanzibar, Mombasa.

Amblyospiza unicolor, Sharpe, Cat. B. M. xiii. p. 503 (1890); Shelley B. Afr. I. No. 455 (1896); Nehrkorn, Kat. Eiers. p. 131 (1899) egg; Nenmann, J. f. O. 1900, p. 283; Reichen. Vög. Afr. iii. p. 99 (1904).
Pyrenestes (Coryphegnathus) unicolor, Oust. Bibl. Ecole Haute Etudes, xxxi. art. 10, p. 9 (1886) Somali.

Adult male. Similar to that of A. albifrons, with the same amount of white on the forehead and wings; but differs in its blacker colouring, the head and ncck, with the exception of the white forehead, being sooty black with only a trace of brown; mantle black like the tail and the dark portion of the wings; breast dusky black. "Iris brown; bill and legs black." Total length 7.2 inches, culmen 1.0, wing 3.7, tail 1.8, tarsus 0.9. 3, 3.2, 00. Msara (Delamere).

Adult female. Similar to that of A. albifrons, but with the brown parts a shade darker. "Iris dark brown; bill with the upper part dark brown and the lower part yellowish; tarsi and feet dark brown." 9, 10. 8. 99. Mt. Kenia (Mackinder).

Immature male. Differs from the adult in having no white on the forehead; head, neck and upper back sepia brown, with some sandy brown edges to the feathers; abdomen and under tail-coverts deep slaty grey, with buff margins to the feathers. Lamu (Kirk).

The Black Grosbeak-Weaver ranges from Zanzibar to Mount Kenia, and has been recorded from Somaliland.

The species appears to be abundant and very evenly distributed over the coast country, between the Kingani and Tana Rivers. Fischer procured the typical specimens in the neighbourhood of Zanzibar and Mombasa, and gives an interesting account of its breeding, in which it resembles its southern ally. It breeds in colonies in marshy places; the nest is constructed of grass and shreds of reed-leaves, is of a long oval form, 7.5 inches deep by 4 broad, and is suspended between two reeds. The eggs, from four to six in number, are white or reddish white, with pale reddish brown and violet spots, measuring 0.92×0.65 . During the construction of the nest the birds are very noisy. The most southern range known to me for the species is the Kingani River, where Bohndorff obtained specimens, three of which are in the British Museum, where there are also examples from the following places: Pangani and Lamu (Kirk), Mombasa (Wakefield), Kilimanjaro and Witu (Jackson), Kikuyu and Msara (Delamere), and Mount Kenia (Mackinder). Besides the above-named places, specimens have been collected at Nguru (Bohndorff), Mamboio (Kirk), Rufu River (Stuhlmann), Arusha, Maurui, Melinda, at Massa and Bonde on the Tana River (Fischer), and Somaliland (Revoil). Dr. Stuhlmann found it called by the natives of the Zanzibar Coast "Ngoma msindo." The species, apparently, does not extend its range so far west as 35° E. long., and is replaced to the westward in Central Equatorial Africa by A. melanota.

Amblyospiza melanota.

Coryphegnathus melanotus, Heugl. J. f. O. 1863, pp. 21, 163 White Nile. Amblyospiza melanota, Sharpe, Cat. B. M. xiii. p. 504 (1890); Shelley,

B. Afr. I. No. 456 (1896); Nehrkorn, Kat. Eiers. p. 132 (1899) egg; Reichen, Vög. Afr. iii. p. 100 (1904).

Amblyospiza melanotis, Hartl. J. f. O. 1888, p. 1 Lado, Magungo, Monbuttu.

Amblyospiza albifrons (non Vigor), Reichen. J. f. O. 1887, p. 308 Kassongo.

Amblyospiza æthiopica, Neumanu, Orn. Monatsb. 1902, p. 9 Kaffa.

Amblyospiza albifrons æthiopica, Reichen. Vög. Afr. iii. p. 99 (1904).

Adult male. Similar to that of A. albifrons and with the same amount of white on the forehead, but differs in the remainder of the head and the neck being of a more cinnamon shade. "Iris brown; bill black; feet olive black" (Jackson). Total length 7:3 inches, culmen 1:0, wing 3:8, tail 2:9, tarsus 0:9. \mathcal{J} , 21. 11. 79. Magungo (Emin).

Adult female and immature. Very similar to those of A. unicolor.

Heuglin's Grosbeak-Weaver ranges over Central Africa from 10° N. lat. to 4° S. lat.

Within the above, somewhat limited, area the species is apparently abundant wherever there is marshland. The type

was discovered on the Upper White Nile by Heuglin, who observed these Weavers constantly flying, singly or in pairs, from the reed-beds, where they roost and breed, into the trees Emin (J. f. O. 1888, pp. 1-3) to feed on berries and fruit. dwells at some length on the habits of this species, which closely resemble those I have already recorded of A. albifrons. He found a colony of twenty of their nests in a marsh near Magungo; the nests were large, oval in form, and hung between two reeds at about five feet above the high-water line; the eggs, four, or sometimes five, in number, were yellowish white with many reddish brown rounded spots, most numerous at the thick end. Emin also found the species abundant at Lado, and met with it as far south as Bukoba on the Victoria Nyanza, and to this species should belong Bohndorff's specimen from Kassongo on the Congo. Mr. Jackson's collection contains eleven specimens, from Uganda, Mount Elgon and Nandi; in the latter country he found them breeding in a marsh in April. The British Museum contains two specimens obtained by Dr. Hinde at Fort Hill on Mount Kenya, showing that in this district, the most eastern range known for the species, it meets with its near ally A. unicolor.

The types of *A. æthiopica*, Neumann, came from Omo and Anderatsha in the Kaffa country, to the north of Lake Rudolf.

Dr. Reichenow (Vög. Afr. iii. p. 90) regards them as representing a subspecies of A. albifrons, and suggests that Bohndorff's specimen from Kassongo on the Congo (A. albifrons, Reichenow, J. f. O. 1887, p. 308) apparently belongs to that subspecies, which implies that the form described as A. athiopica is represented from the extreme north-east and south-west limits of the known range of A. melanota, which is strongly against A. athiopica being even subspecifically distinct from A. melanota, and as I can find no character for the recognition of that form, I have united it with A. melanota. It is, how-

AMBLYOSPIZA CAPITALBA

ever, possible that the types of A. *wthiopica* are hybrids between A. *melanota* and A. *unicolor*, for they are described as intermediate between those two species, both in the colouring of the head and neck and in the size of the bill, and were procured near the junction of the range of those two forms, both of which may be regarded as subspecies of A. *albifrons*. The three forms resembling each other in the pattern of the plumage from the nestling to the adult stage, when they all assume the same amount of white on the forehead and base of primaries and are then distinguishable mostly by the shade of colouring of the head and neck.

Amblyospiza capitalba. (Pl. 36, fig. 1.)

Coryphegnathus capitabus, Bp. Consp. i. p. 451 (1850) Ashantee.

 Amblyospiza capitalba, Sharpe, Cat. B. M. xiii. p. 504 (1890) Gold Coast, Abeokuta; Shelley, B. Afr. I. No. 457 (1896); Nehrkorn, Kat. Eiers. p. 132 (1899) egg; Reichen. J. f. O. 1902, p. 36 Togo; Reichen. Vög. Afr. iii. p. 101 (1904).

Adult male. Similar to that of A. albifrons, with the same amount of white on the wing but more on the head, and it is a smaller and paler bird, differing in the remainder of the head, the neck aud front of the mantle being lighter cinnamon, and the breast, thighs and under tail-coverts much paler grey. "Iris brown; bill blackish; feet lead grey" (Reichenow). Total length 5:8 inches, culmen 0:95, wing 3:35, tail 2:4, tarsus 0:9. Gold Coast (Ussher).

Adult female. Similar to that of A. albifrons. Wing 3.2. 9, Commendah (Blissett).

The Ashantee Grosbeak-Weaver ranges over West Africa from the Gold Coast into Angola.

The type came from Ashantee. According to Ussher, who was twelve years on the Gold Coast, it is a scarce bird there, but was procured for him by Aubin from the forest of Denkera. Other specimens have been collected by J. Hickman

DINEMELLIA

in the interior of Fantee, by Blissett at Commendah, by Pel at Sekundi, by Haynes at Accra, and in Togoland, at Agome Palime, by Baumann. In the British Museum there is a specimen from Abeokuta, and I find it only on one occasion recorded from Camaroous, where, according to Mr. Zenker, it is called by the natives the "Incocum." In Loango specimens have been collected by Petit, and by Falkenstein who records the colouring of the soft parts of the adult, and of the young birds of different ages, so it was probably not very rare at Chinchonxo, which he made his headquarters during his visit to that coast. Professor Bocage has just informed me that Mr. Francis Newton has obtained the species at Galungo-alto, in Angola, which considerably extends its previously known range.

Genus V. DINEMELLIA.

Bill strong, about as long as the head, deeper than broad, evenly compressed, the sides being nearly straight, culmen wide and flattened, extending back in an acute angle through the frontal feathers; cutting edges of mandibles smooth; nostrils exposed and not placed in a groove. Primaries 3, 4 and 5 longest; 1 half length of 3. Tail very slightly rounded. Tarsi and feet fairly strong. Sexes alike in plumage. No hairlike plumes on back of head or hind neck.

				Type.
Dinemellia, Reichenb. Singv. p. 88 (1863)				D. dinemelli.
Limoneres, Reichen. J. f. O. 1885, p. 372				D. dinemelli.

The genus is confined to Eastern Africa, where it is represented by two closely allied species, remarkable in having the head, neck and breast white; bend of wing, upper and under tail-coverts carmine; also in having a white speculum on the primaries, as in *Amblyospiza*. The genus, although most nearly allied to *Textor*, forms a link between the latter and *Amblyospiza*.

KEY TO THE SPECIES.

a. With white edges to the brown feathers
b. No white edges to the brown feathers
c. beehmi.



Dinemellia dinemelli.

Texto dinemelli, Rüpp. Syst. Uebers, pp. 72, 76, pl. 30 (1845) Shoa;
 Gray and Mitch. Gen. B. ii. p. 350, pl. 87, fig. 2 (1849); Bartl. Mon.
 Weaver-birds, Pt. i. pl. i. fig. 1 (1888).

Dinemellia dinemelli, Sharpe, Cat. B. M. xiii, p. 506 (1890); Shelley, B. Afr. I. No. 459 (1896); Elliot, Field Col. Mus. Orn. i. p. 36 (1897); Grant, Ibis, 1904, p. 259 *Abyssinia*; Reichen. Vög. Afr. iii. p. 7 (1904).

Textor leucocephalus, Rüpp. Syst. Uebers. p. 72 (1845).

Dinemellia ruspoli, Salvad. Mem. Acc. Torino, 1894, p. 558 Somali; Shelley, B. Afr. I. No. 460 (1896).

Adults. Head, neck and breast white; remainder of the upper parts brown, with the lower back, upper tail-coverts and a few of the least wingcoverts orange-shaded vermilion; broad white bases to the primaries; scapulars, greater wing-coverts and secondaries with broadish buff outer edges; tail uniform brown; under surface of wings sepia brown, with a broad band of white across the base of the primaries; thighs dark brown; lower abdomen and under tail-coverts orange shaded vermilion. "Iris brown; bill and legs blackish." Total length 8.2 inches, culmen 0.05, wing 4.7 and 4.4, tail 3.2, tarsus 1.2. \mathcal{J} , 11.1.00, and \mathfrak{g} , 10.1.00. Lake Baringo (Delamere).

Type of D. ruspolii. Smaller; brown parts paler; basal white portion of quills less sharply defined; basal portion of inner webs of the primarycoverts white and the bend of the wing washed with red. Wing 4.4.

Var. Differs from typically coloured specimens in having the mantle and wings mostly white, shading into brown towards the centres of the feathers, and darker brown at the end portion of the primaries; shafts of quills white; the red on the wing less sharply marked, but extending as a scarlet wash ou to the hase of the first primary; tail pale brown, with the shafts of the feathers white; thighs brownish buff. Culmen 0.85, wing 4.3. Foot of Goolis Range (L. Phillips).

Dinemell's White-headed Weaver ranges from the latitude of Zanzibar into Southern Abyssinia and the Sudan.

The most southern range known to me for this species is Mamboio, half-way between Zanzibar Island and Ugogo, in which latter country it is replaced by *D. bochmi.* It is represented in the British Museum from the following places: Mamboio (Kirk), Masailand (J. Thomson), Ukamba (Hildebrandt), Useri River (Hunter), Elgeyu and Batzsuma (Jackson),

DINEMELLIA DINEMELLI

Lado (Emin), Lake Baringo (Delamere), thirteen specimens from Somaliland, Arbawun (Pease), Ambukara (Antinori), Abyssinia (Verreaux), and the Sudan (Knoblecher). Besides the above-mentioned localities, specimens have been collected by Fischer on the Pare Plateau, where he met with six of them feeding on the ground in company with a large flock of *Spreo superbus*, and also found the species near Kilimanjaro, the Tana River and Barawa. Hildebrandt observed it nesting in moderate sized trees close to Malimboa in Ukamba. Mr. Jackson met with it at Njemps on Lake Baringo, and found the species fairly plentiful in the neighbouring mountains of Kamassia at Elgeyu. According to Emin the species is not rare on the White Nile near Lado, and Heuglin met with it at the Gazelle River frequenting the open country.

The type was discovered by the late Major Harris in Shoa, where, according to Dr. Ragazzi, these Weavers are abundant, and in Southern Abyssinia they are, according to Mr. Pease, "quite common in the low country, always in noisy companies of twelve to fifteen, frequenting the bush and feeding on the ground."

In Somaliland Prince Ruspoli procured three typical examples of *D. dinemelli* and a small specimen, the type of *D. ruspoli*, Salvadori, which I do not consider to be recognisable as a subspecies. Mr. Lort Phillips writes: "These birds are fairly common throughout the country, frequenting the mimosa trees. They are very noisy when on the wing, and breed in colonies. Their eggs are green, thickly speckled with dark brown, and 0.95 inch long. In one of these colonies a pair of small hawks, *Poliohierax semitorquatus*, had usurped a nest, but were regarded apparently as welcome visitors by these sociable Weavers." He also met with them, "along the foot of the Goolis range, where it was breeding in small colonies in Murch and April. The nests are huge, clumsy affairs,

DINEMELLIA BOEHMI

placed at the extremity of the boughs of the taller mimosa trees, and look like flat masses of the sharpest thorns; the entrance, however, is from below, and the interior is lined with soft grass. The eggs are pale blue, dotted with dark brown spots." Mr. Hawker records it as extremely common on the tableland in small flocks accompanying *Spreo shelleyi*.

Dinemellia boehmi.

Textor böhmi, Reichen. J. f. O. 1885, p. 372, Unyamwesi; Bartl. Mon. Weaver-birds, Pt. i. pl. 1. fig. 2 (1888).

Dinemellia boehmi, Sharpe, Cat. B. M. xiii. p. 507 (1890); Shelley, B. Afr. I. No. 461 (1896); Reichen. Vög. Afr. iii. p. 8. (1904).

Adult. Similar to *D. dinemelli*, from which it differs only in having the brown portions of the plumage a shade darker, and the pale edges to the feathers of the upper parts absent or only slightly indicated on the inner secondaries. "Iris black; bill reddish; feet black" (Werther). Total length 8.4 inches, culmen 0.95, wing 4.8, tail 3.5, tarsus 1.35. 9, 23. 10. 82. Gonda (Böhm).

Böhm's White-headed Weaver ranges over Eastern Africa from north of Lake Nyasa, Lake Tanganyika and the Ugogo country to the Victoria Nyanza.

This very closely allied representative of the more widely distributed *D. dinemelli* has been procured in Kondeland by Sir Alfred Sharpe. Böhm obtained specimens at Qua Mpara, on the western shore of Lake Tanganyika, and records it as abundant in small flocks frequenting the more park-like country round Kakoma, often in company with Urolestes æquatorialis. While perched on a bush, or more often from the summit of an acacia tree, it pours forth its shrill, trumpetlike note, from which he suggests that its native name "Tulieh," is probably derived. The nests, several of which are usually built together, are generally placed at the top of a thorny acacia, and are rather untidy looking structures of

TEXTOR

grass, a few feathers and leaves, with the entrances on the under side, and are carefully protected by a surrounding of thorny boughs, which encircle not only the nests themselves, but also all the branches leading up to them. A single nest, without the surrounding twigs, measured 9.6 inches. The egg he describes as greenish white, spotted and scrawled with blackish brown.

The species was first obtained by Speke who wrote: "Shot at Tura in Unyamwesi, where it goes about in small flocks." Emin met with it in that country and in Ugogo, and Fischer's specimens came from Loeru, Salanda and Kagehi.

Genus VI. TEXTOR.

Very similar in general structure to *Dinemollia*, but with the bill longer than deep and the culmen less curved. It differs entirely in the pattern and colouring of the plumage, which in adults is almost uniform black.

, Temn	n. Pl. Col.	iii. p. 78	5, pl. 4	446 ((182	. (8				T.	albirostris.
, Less.	Traité, p.	433 (18	31) .		•					T.	albirostris.
ornis, S	mith, Rep	. Exped	l. Cent	ar. A	fr. 1	1836	, p.	51		T.	niger.
oides, Sv	wains. Cla	ssif. B.	ii, p. 2	278 (183	7).				T.	albirostris.
rnis, Re	eichenb. S	ingv. p.	89 (18	863)						T.	albirostris.
	, Less. ornis, S oides, S	, Less. Traité, p. ornis, Smith, Rep oides, Swains. Cla	, Less. Traité, p. 433 (18 ornis, Smith, Rep. Exped vides, Swains. Classif. B.	, Less. Traité, p. 433 (1831) ornis, Smith, Rep. Exped. Cent ides, Swains. Classif. B. ii. p. 9	, Less. Traité, p. 433 (1831) ornis, Smith, Rep. Exped. Centr. A vides, Swains. Classif. B. ii. p. 278 (, Less. Traité, p. 433 (1831) ornis, Smith, Rep. Exped. Centr. Afr oides, Swains. Classif. B. ii. p. 278 (183	, Less. Traité, p. 433 (1831)	c, Temm. Pl. Col. iii. p. 75, pl. 446 (1828) . . T. , Less. Traité, p. 433 (1831) . . . T. ornis, Smith, Rep. Exped. Centr. Afr. 1836, p. 51 . T. . . T. oides, Swains. Classif. B. ii. p. 278 (1837). . . . T. rnis, Reichenb. Singv. p. 89 (1863) . . . T.			

The genus is confined to Tropical and South Africa. It comprises four closely allied species, which are called Buffalo-Weavers, on account of their habit of following herds of those animals. In general habits and in the construction of their nests they closely resemble the *Dinemellia*.

KEY TO THE SPECIES.

a. No white on under surface of wiugs.						
a ¹ . Bill with the base swollen, rough and whitish ; wing more						
than 4.5 inches	albirostris.					
b^{1} . Bill smooth and reddish black; wing less than 4.5 .	senegalensis.					
b. Some white on under surface of quills; bill red in adults.						
c ¹ . Much less white on under surface of quills	intermedius.					
d^{1} . More than half of under surface of quills white.	niger.					

Textor albirostris.

Coccothraustes albirostris, Vieill. N. Dict. xiii. p. 535 (1817).

Textor albirostris, Bartlett, Mon. Weaver-birds, pt. ii. pl. 4 (1888); Sharpe,
 Cat. B. M. xiii. p. 508 (1890); Shelley, B. Afr. I. No. 462 (1896);
 Nehrkorn, Kat. Eiers. p. 132 (1893) egg; Grant, Ibis, 1900, p. 134
 S. Abyssinia; Reichen. Vög. Afr. iii. p. 3 (1904).

Textor alecto, Temm. Pl. Col. iii. p. 75, pl. 446 (1826).

Adult male. Entire plumage glossy black, of a uniform more brownish shade on the under surface of the quills and tail-feathers; the outer webs of the middle primaries partly edged with white; the white bases of the feathers often show through the black on the lower back and flanks. "Iris brown; bill black, the basal portion in adults covered with a fleshy cere, pale yellow in colour." Total length 8.6 inches, culmen 1.0, wing 4.8, tail 4.2, tarsus 1.2. 3, 2.3. 68. Waliko (Jesse).

Adult female. Exactly like the male. Wing 4.8. 9, 21. 7. 68. Waliko (Blanford).

Immature. Differ in having the plumage brown, with the inner margins of the quills slightly paler. Anseba (Esler). The bill is whitish or horny brown (Reichenow).

The White-billed Buffalo-Weaver ranges over North-east Africa from 16° N. lat. to the Equator.

The most southern range positively known to me for the species is Lake Baringo, where Mr. Jackson found it breeding at Njemps in September, and writes : "Iris brown; bill black, with greenish yellow base; feet pale slate colour. They are the first I have seen of this species; they were breeding. The nest was a large mass of black thorns, three or four nests being clustered together; all with three eggs." Both specimens show no trace of white on the under surface of the quills, and in one the base of the upper mandible is much swollen, so there can be no doubt as to the species to which they belong. On the Upper White Nile Emin has collected specimens at Lado, Harif and Muggi.

The Nile district and Abyssinia I look upon as the true home of the species; but here, according to Brehm, it is not

TEXTOR ALBIROSTRIS

very common and was not met with further north than 16° N. lat., and he informs us that it breeds in colonies of from three to eighteen nests, each 3 or 4 feet in diameter, including the surrounding structure of thorny twigs and small branches, loosely arranged, giving the structure the appearance of a thick bristly bush; on one side, usually to the westward, is the entrance, which at the mouth is wide enough to admit a man's fist quite easily, but gradually diminishes to just sufficient size to allow the bird to pass. The interior of each nest is lined with fine rootlets and grass. During the nesting season these birds are exceedingly noisy and may be heard at a great distance, and he writes: "During a few minutes I spent under a tree I wrote down the following sounds. One of the male birds began : Ti, ti, terr, terr, terr, zerr, zaili; another answered Gai, gai, zai; a third uttered the sounds, Guik, quik, guk, guk, gai; others screamed, Gu, gu, gu, gu, gai, and a few listened intently. They behaved like a swarm of bees. Some came, others went, and it seemed almost as if all the grown fledglings had also collected on the tree, for the large number of birds did not correspond to the few nests. The flight is very easy and hovering, marked by slow flapping of the wings. The wings are carried very high. Its run is quick and nimble, and the bird is also an adept in climbing." Heuglin remarked that he did not meet with it at any great height in the mountains, but observed it near the Anseba River at Barka, on the Mareb as far up as Serawi, in Sennaar, Kordofan, and the White Nile up to the Sobat River. He found them breeding from July to September. The trees once resorted to for breeding are used for several years. The massive nest structures are heaped upon forks and horizontal boughs some 15 to 30 feet from the ground, and are from 5 to 8 feet in length and 3 to 4 feet broad, where from three to eight pairs breed, each forming their own dwelling, like Sparrows in the Stork's nest, and fairly deep towards the interior. These nests are thickly and comfortably lined with fine grass, rushes, small roots and wool, and contain three or four eggs, coloured like those of our House-Sparrow, of a blunt oval shape and with a rather thick, rough shell. They measure on an average 1.2×0.8 .

These birds find their food mostly in the pasture land, and according to both Dr. Blanford and Mr. Jesse, at such times may be seen in company with Glossy Starlings.

Textor senegalensis.

Textor senegalensis, Shelley, B. Afr. I. p. 34, No. 466 (1898) Gambia. Textor albirostris senegalensis, Reichen, Vög. Afr. iii, p. 5 (1904).

Type. Similar to the adult male of T. albirostris, but differs in its smaller size and in the bill being entirely smooth and reddish black. Total length 8:3 inches, culmen 0.9, wing 4:4, tail 3:6, tarsus 1:1. Gambia (Brit. Mus.).

The Senegal Buffalo-Weaver ranges from Senegambia into Abyssinia.

This species is known to me positively by only three specimens in the British Museum, two from the Gambia River and the other from Abyssinia (Rüppell); the latter is slightly the smallest (wing 4.2 inches), otherwise these specimens agree perfectly. To this species should belong the specimens from Deine on the Senegal River (Marche and De Compiègne), Bathurst (Rendall) and Cassamanse (Verreaux).

Textor intermedius.

Textor intermedius, Cab. J. f. O. 1868, p. 413; id. Decken's Reis. iii. p. 32, pl. 11 (1869) *Dalaoni*, R. Kisuani; Sharpe, Cat. B. M. xiii. p. 511 (1890); Shelley, B. Afr. I. No. 464 (1896); Grant, Ibis, 1904, p. 259 S. Abyssinia.

TEXTOR INTERMEDIUS

Textor albirostris intermedius, Reichen. Vög. Afr. iii. p. 4 (1904).

Textor scioauus, Salvad. Ann. Mus. Genov. 1884, p. 195 Shoa; Sharpe, Cat. B. M. xiii. p. 511 (1890); Shelley, B. Afr. I. No. 463 (1896).

Adults. Similar to those of *T. albirostris*, but distinguished by having a wash of white on the under surface of the quills and the bill being red inclining to brown at the tip. "Iris brown; feet black" (Lort Phillips). Total length 8:8 inches, culmen 0:95, wing 4:9, tail 4:0, tarsus 1:2. 3, 7, 1. 00. Tadechmulka (Harrison).

Immature. Upper parts slaty grey, with imperfect white edges to the outer greater wing-coverts, primaries and tail-feathers; under surface of quills brown, gradually fading into buff towards the base of the primaries; under wing-coverts blackish, with some white terminal margins; sides of head slaty grey, inclining to white in front of the eyes and on the cheeks; under parts mottled with white and slaty grey, the former predominating on the throat and centre of the breast, on which latter part the broad dark bars become lanceolate. "Iris brown; bill dark brown; feet black" (Lort Phillips). Wing 4.5. 9, 1, 2, 00. Msara (Delamere).

Cabanis's Buffalo-Weaver ranges over Eastern Africa from the northern end of Lake Nyasa to Southern Abyssinia.

In its southern range it has been obtained by Sir Alfred Sharpe between Kandeland and the Ruaha River, by Emin at Mpapwa and Nianguira in Ugogo, and it apparently does not wander further west than 33° E. long.; but seems to be plentiful and very evenly distributed throughout its range, northward from Ugogo, judging from the list of localities where the species has been actually obtained, as given by Dr. Reichenow in his "Vögel Afrikas."

The types were discovered by the late Baron Carl v. d. Decken at the Dalaoni River and Kisuani. In this latter district, between the Pare Highlands and the Pangani River, Fischer saw a colony of these Weavers breeding in a clump of acacia trees and describes their habits, which are very similar to those of the other members of the genus, and Mr. Pease found them in Southern Abyssinia feeding on the ground in company with Glossy Starlings and Hornbills. Hildebrandt

TEXTOR INTERMEDIUS

met with them nesting in large colonies at Ikang in Ukamba. From Somaliand Mr. Lort Phillips writes: "Very plentiful in flocks near Faf in the interior of the plateau, which in the rainy season becomes a lake. In March they were busily building colonies of nests in the higher trees. In habits they much remind one of Starlings, especially when feeding on the ground."

The species is well represented in the British Museum from Somaliland and Southern Abyssinia, also by two of Lord Delamere's specimens from Msara to the north-east of Mount Kenia and two from Shoa. Mr. Jackson's collection contains an adult male and an immature female from Youte near the mouth of the Jub River and one from the Kikuyu country, while two specimens from Niemps belong to T. albirostris. This is an interesting fact, showing how the range of the two closely allied species meet, and it is not improbable that they may sometimes interbreed, and this may account for a few specimens of T. intermedius, including the type of T. scionanus having the basal portion of the bill somewhat swollen as in T. albirostris; a character which appears to occur only towards the junction of the range of the two species. The type of T. scioanus was obtained by Antinori at Daimbi in Shoa, where, according to Ragazzi, the genus is poorly represented. To this form Mr. Oscar Neumann refers a bird he procured at Kwa Kitoto in Kavirondo, so that any naturalist wishing to recognise D. sciounus as a good subspecies will find its range confined to a long narrow strip of country separating the range of T. albicentris from that of T. intermedius.

TEXTOR NIGER

Textor niger.

- Bubulornis niger, Smith, Rep. Exped. C. Afr. App. p. 52 (1836) Kurrichaine.
- Textor niger, Sharpe, Cat. B. M. xiii. p. 509 (1890); Shelley, B. Afr. I. No. 465 (1896); Reichen. Vög. Afr. iii. p. 5 (1904).
- ? Loxia panicivora, Linn. S. N. (x.) p. 173 (1758); (xii.) i. p. 302 (1766) India.

Textor panicivora, Bartlett, Mon. Weaver-birds, pt. ii. pls. 2, 3 (1888).

Textor erythrorhynchus, Smith, Ill. Zool. S. Afr. Aves, pl. 64 (1841) Kurriehaine.

Adult male. General plumage glossy black; the white basal portion of the feathers often showing through, mostly so on the lower back and the flanks; primaries with some imperfect white outer edges; under surface of wings, with nearly the whole of the coverts and the terminal portion of the quills black, and the centre half white. "Iris hazel; bill red; legs salmon colour." Total length S:7 inches, culmen 0.95, wing 4.9, tail 4.1, tarsus 1.3. 3, 16.7.73. Transvaal (Buckley).

Adult female. Differs in the dark parts being of a more slaty shade and the upper throat mottled with white. Wing 4.3. \mathfrak{P} . Kiulo (Anchieta).

Immature. Differs from the adult female in having some imperfect white edges to the outer greater-coverts and primary-coverts; under wing-coverts with some white terminal margins; sides of head whitish in front of the eyes and on the cheeks; under parts mottled with white and slaty grey, the former predominating on the throat and centre of the breast, on which latter portion the broad dark bars become lanceolate.

The Southern Buffalo-Weaver ranges from Angola into Damaraland and crosses the continent into Portuguese South Africa.

The species is represented in the British Museum from the following places: Galungo, on the Bengo River (Sala), Quanza River (Monteiro), Humbe (Anchieta), Damaraland (Andersson), Bamangwato (Buckley), Transvaal (T. Ayres), Kooroomooroui Pan (Jameson), Tati (Oates), Makalaka (Bradshaw).

Professor Bocage informs us that Anchieta found it to be most abundant around Quillenques and Humbe, and known at the former place as the "Quicenque-cenque," and at the latter

TEXTOR NIGER

as the "Zembo-zembo," and like Andersson, remarked that several pairs construct one block of nests for their common use, the diameter of which is over 20 inches. Van der Kellen also procured the species in the Upper Cunene district near Humbe.

Andersson writes: "Rather common in Damaraland and also in the Lake regions, where it is known to the natives by the name of 'Tsaba Gushoa.' It is a noisy species, gregarious in its habits, breeding in colonies, and constructing many nests in the same tree; it seems to prefer the giraffeacacia for the purpose of nidification; and it is curious that when these birds have used a tree for this purpose it usually withers in a short time after the building of the nest is completed; but whether the birds instinctively select such trees as have a tendency to decay, I am unable to say. The collective nests consist externally of an immense mass of dry twigs and sticks, in which are to be found from four to six separate nests or holes of an oval form, composed of grass only, but united to each other by intricate masses of sticks, defying the ingress of any intruder except a small snake. In each of these separate holes are laid three or four eggs. exactly resembling Sparrows' eggs, but much larger. I obtained no less than forty of the eggs (all much incubated), on January 29, from two low trees standing close together, at Amatoni, in latitude 18° south; and on the following day the birds were busy in repairing one of the collective nests, which had been injured during the collection of the eggs which it contained. I believe these nests are annually added to; for, so far as I have been able to see, the same nest is retained for several consecutive seasons,"

The species has not yet been recorded from further south than Damaraland and the Transvaal. Sir Andrew Smith writes: "It was not till after we had passed to the north-(Pebruary, 1905. 21

TEXTOR NIGER

ward of the 25th degree of south latitude that we discovered this bird; and if we are to believe the natives, it rarely extends its flight further to the southward, which they attribute to the scarcity of Buffaloes south of that parallel. Wherever it was discovered it was always in attendance upon herds of the animals just mentioned, and either flying over the members of which the group was composed, or else perched upon the back of some individual animal. While perched, it appeared, generally, to be employed in collecting articles of food from the hide; and while so occupied it passed quickly from one part of the Buffalo to another, without the latter appearing to bestow the slightest attention upon its movements."

"More often," according to Stark, "these birds search for their food on the ground, not far from trees and bushes, in which they seek refuge if disturbed. They feed upon the larger insects, locusts, termites, beetles and various larva. occasionally upon seeds and berries. These are alert, vivacious and noisy birds, fond of the society of their own species and that of other birds. They feed in flocks and build in colonies, their large collective nests being frequently surrounded by those of Sparrows and other Weaver-Birds. On the Limpopo River they frequently build in a tree that is already occupied by the nest of an Eagle or Vulture, possibly because the proximity of their powerful neighbours afford them protection against the attacks of monkeys and snakes. Generally from four to seven pairs of the Buffalo Weaver-Bird unite to build a common nest of closely interwoven sticks and thorny twigs, oval openings being left here and there, which are afterwards lined with dry grass and used both as nesting and roosting places. The collective nest, which measures three or four feet across, is repaired and added to from time to time and often lasts for many years. As many as six of the larger

nests may be sometimes seen in a single tree, each inhabited by as many pairs of birds. The eggs, laid on the Limpopo in December, are three or four in number, greyish white, streaked and marbled with several shades of grey and brown. They measure about 1.12×0.90 ."

Genus VII. HISTURGOPS.

Similar to *Textor* in general structure, but differs in the nostrils opening at the end of a groove, and are slightly more basal. General plumage brown and white, with a considerable amount of cinnamon on the wings and tail.

Type. Histurgops, Reichen, J. f. O. 1887, p. 67 H. ruficauda.

This genus, which is represented by a single East African species, is closely allied to *Textor*.

Histurgops ruficauda. (Pl. 36, fig. 2.)

Histurgops ruficauda, Reichen. J. f. O. 1887, p. 67, *Ruwana R., Wemberc*; Sharpe, Cat. B. M. xiii. p. 505 (1890); Shelley, B. Afr. I. No. 467 (1896); Reichen. Vög. Afr. iii. p. 9 (1904).

Adult. Upper parts brown; forehead, crown, back and sides of neck, mantle and lesser wing-coverts with brownish buff edges to the feathers; lower back rather paler and more uniform, shading gradually into cinnamon on the upper tail-coverts; tail bright cinnamon, with the centre pair of feathers darker, mostly sepia brown; remainder of the wings dark brown, the feathers broadly margined with buff of a rufous shade on most of the quills, the inner webs of which have a basal portion pale cinnamon, so that more than half of the under surface of the wing is of that colour, the ends of the quills being dark brown and the coverts sandy buff; sides of head brown, inclining to black in front and below the eyes, the other feathers have buff edges, giving the cheeks a streaked appearance; chin and centre of throat white, with a line of hair-like blackish shafts down the middle; sides of throat and the breast buff, with darkish brown centres to the feathers; under tail-coverts cinnamon bnff. "Bill brown, yellowish on the under mandible; feet brown." Total length 8.5 inches, culmen 0.8, wing 5.1, tail 3.7, tarsus 1.05. J, 22. 1. 86. Ruwana R. (Fischer).

PLOCEPASSER

The Rufous-tailed Weaver inhabits Central German East Africa between 5° and 2° S. lat.

The typical specimens were discovered in the Wembere country and at the Ruwana River, by Fischer, who compares their nest, which has two openings and was placed in the fork of a thick acacia tree, to that of *Ploceipasser melanorhynchus*.

Emin collected specimens at Usambiro in October, and gives some interesting notes in a letter dated November 21, 1890. Here he calls it the most characteristic species throughout the wide, open country which stretches from Usongo to the Victoria Nyanza, and the, then leafless, acacia trees were decorated with many of their nests, placed in forks or hanging from the boughs. It is a sociable, noisy bird, with a note similar to that of the larger Yellow Weaver-Birds, but harsher. It was busy, at the time, in the construction of the nests, in one only of which he found eggs, but suggests that the full number in a clutch is probably three. When on the ground it has a stately walk, and feeds on worms and insects.

The species has been procured by Mr. Werther at Meatu, and by Mr. Oscar Neumann in Umbugwe, at Lake Manjara, and at Muansa near the Ruwana River on the south-west side of Victoria Nyanza.

Genus VIII. PLOCEPASSER.

Bill deeper than broad, evenly compressed, the sides being nearly straight; culmen rounded and extending back in an acute angle through the frontal feathers; cutting edges of the mandibles smooth; nostrils exposed in the front of a short groove. Wing pointed, the longest primary extending beyond the shortest one by more than the length of the tarsus; primaries 1 about one-third of 2; 2 shorter than 3, which is one of the longest. Tail square. Tarsi and feet fairly strong, and the claws strong and rather short, as in *Textor*. Plumage brown and white with two pale bars across the wing-coverts, and with either a broad white eyebrow or the rump white. Sexes alike in plumage.

 Type.

 Plocepasser, Smith, Rep. Exped. Centr. Afr. 1836, p. 51
 P. mahali.

 Leucophrys, Swains. Classif. B. ii. p. 287 (1837)
 P. mahali.

 Agrophilus, Swains. t. c. p. 291
 P. superciliosus.

 Philagrus, Cab. Mus. Hein. i. p. 179 (1851)
 P. mahali.

The genus is confined to Tropical and South Africa and comprises seven species.

KEY TO THE SPECIES.

a. Rump and upper tail-coverts white.

- a¹. A broad white eyebrow ; crown black.
- a³. Crop uniform white like the throat and breast.
 a³. Bill horny brown; under surface of wings paler mahali.
 b³. Bill black; under surface of wings darker . melanorhynchus.
 b². Crop mottled, with brown centres to feathers.
 c³. Bill black; crop marking dark brown . . . pectoralis.
 d³. Bill brown; crop marking pale brown . . . propinguatus.
 b¹. No white evelrow; crown brown doualdsoni.

d1. Crown grey; mantle rufous rufoscapulatus.

Plocepasser mahali.

Plocepasser mahali, Smith, Rep. Exped. C. Afr. p. 51 (1836) N. of Orange R.; Sharpe, Cat. B. M. xiii, p. 245 (1890); Shelley, B. Afr. I. No. 468 (1896); Whitehead, Ibis, 1903, p. 223 Orange R.; Reichen. Vog. Afr. iii. p. 11 (1904); Clarke, Ibis, 1904, p. 524 Modder R.

Leucophrys pileatus, Swains. Classif. B. ii. p. 287 (1837).

Agrophilus hæmatocephalus, Licht. Nomenel. Av. Mus. Berol. p. 50 (1854).

Type. Crown, forehead, front of sides of head and a band down the sides of the throat black; a very broad white eyebrow extends from above the front of the eye to the sides of the nape; ear-coverts, sides and back of neck, mantle and lesser wing-coverts clear brown; lower back and upper tail-coverts white; tail dark brown, with pale edges to the feathers, the edges fading into white on the ends and on the sides of the centre pair; remainder of the wings dark brown, with broad buffy white ends to the median and greater coverts, forming two well-marked bars; quills with buff edges, broadest towards the inner secondaries; under surface of wings, with

PLOCEPASSER MAIIALI

the coverts and broad inner edges to the quills, buff; under parts white, shaded with buff on the breast. "Iris dark red; bill horn colour; legs brown" (Buckley). Total length 6.8 inches, culmen 0.7, wing 3.9, tail 2.5, tarsus 1.0. " \mathcal{J} , between the Orange R. and the Tropic" (Smith).

Adult female. Like the male. "Iris bright red brown; bill light dusky brown, with under mandible pale brown." Wing, 3.8. 9, 3.5.79. Rhinoster R. (T. Ayres).

Smith's Sparrow-Weaver rauges from Angola and Matabeleland into Eastern Cape Colony and the Transvaal.

The most northern range I can find for the species is Biballa, near the right bank of the Quanza River; here it has been procured by Anchieta, who also records it as abundant in the flat country round Capangombe and obtained specimens at Maconjo, Kiulo, and in the Humbe district.

The species is represented in the British Museum from the following localities: Capangombe, Maconjo and Rio Chimba (Anchieta), Matalko (Andersson), Griqualand (Atmore), Matabele (T. E. Buckley), Palatsie River (F. Oates). Andersson writes: "Damaraland proper would seem to be the stronghold of this species; but I have also found it abundant at Lake Ngami and in the neighbourhood of the Okavango, and it likewise occurs, though less frequently, in Great Namaqualand. It is gregarious in its habits and may occasionally be seen in large flocks; it usually frequents the wildest and most desolate spots, far away from either fountain or stream." He adds: "At the beginning of the rainy season this bird occasionally, though rarely, sings so melodiously that I have seldom heard anything more exquisite." From south of the Orange River it is known to me only by Ortlepp having procured the species at Colesberg, and Bradshaw "met with a small colony of these birds in a valley of thorn trees several miles south of the Orange River, when coming down from the border in May, 1882."

Sir Andrew Smith discovered the species in the country

between the Orange River and the Tropic. He writes : "Each nest was composed of stalks of grass, the thickest extremities of which were so placed as to protrude externally for several inches beyond the more compact structure, destined to contain the eggs." It is, according to Stark, "abundant to the north of the Orange River among bushes and mimosa trees, but is rarely met with in the open country. Of social habits, it remains in flocks all the year round and breeds in company, several nests being generally built in a single tree. Rarely have I met with more pugnacious birds; the males in spring are constantly fighting, and so desperate are their quarrels that the combatants frequently lie exhausted, side by side, on the ground, incapable of further movement. They are noisy birds, too, very 'sparrow-like' in their manners and customs, and keep up a constant chatter while searching for food. This consists of locusts, termites, small beetles, and a variety of small grain and seeds. The young appear to be fed on larvæ and small caterpillars. If disturbed when feeding they seek shelter in the nearest bush or tree. In addition to their somewhat harsh call-notes of 'chick-chick,' the males in spring indulge in a song of some sweetness. The nests are large, roughly-built, kidney-shaped structures, usually placed near the ends of the branches of a mimosa or other thorny tree. They are constructed of long grass-stems, the blades and flowering tops being woven together; the stiff stalks project in all directions. During the winter each nest has two entrances from below, separated in the interior by a narrow bridge of grass, on which the birds roost. At the beginning of the breeding season one entrance is stopped up with leaves and grass, a shallow cavity being left in which the female deposits two or three eggs, about the first week in December on the Limpopo River. As soon as the young are on the wing the second entrance is unstopped, and the nest is again used, both

PLOCEPASSER MELANORHYNCHUS

by the old and young birds, as a roosting place. These nests are annually repaired and last for many years. The eggs are white, suffused with pink, thickly marked, especially at the broad end, with blotches and streaks of deep brown pink, They average 1.00×0.72 ." My late friend, T. E. Buckley, while in Matabeleland, made the following note: "Most of the nests have a hole right through, and seem only to be used for roosting in, as there is no place for eggs; it is the olderlooking nests that contain the eggs, which are pink, speckled with brown; these nests have only one entrance. The male has a short sweet song."

Major Clark also remarks that the call-notes and babbling of a flock of these birds are very pretty, and were constantly heard by him in the thorn scrub on the Bloemfontein side of the Modder River.

Plocepasser melanorhynchus.

Plocepasser melanorbynchus, Rüpp. Syst. Uebers, p. 78 (1845) Shoa; Sharpe, Cat. B. M. xiii. p. 246 (1890); Shelley, B. Afr. I. No. 469 (1896); Grant, Ibis, 1904, p. 257 Tadejemulka, Serba; Reichen. Vög. Afr. iii. p. 12 (1904).

Adult male. Forebead, crown, nape and front of face black, shading into brown on the ear-coverts and neck; a broad white eyebrow, separating the eye and ear-coverts from the crown; back and sides of neck, mantle and lesser wing-coverts earthy brown; lower back and upper tail-coverts white; wings brown above and below; a few white feathers at the bend of the wing; median coverts white; greater coverts with white ends, broadest on the inner feathers; quill with buff edges broadest on the inner secondaries; tail dark brown, with broadish terminal pale margins; under parts uniform white, with the flanks brown; a black band margins the sides of the throat. "I ris brown; bill black; legs brown" (Pease). Total length 7-0 inches, culmen 0.65, wing 4-0, tail 2-8, tarsus 0.9. \mathcal{J} , 14, 2. 80. Lado (Emin).

Adult female. Similar in plumage to the male. Wing 3.8. $\ \$, 18.3.01. Daira Aila (Pease).

The Black-billed Sparrow-Weaver inhabits Eastern Africa between 2° S. lat. and 11° N. lat., ranging westward to the Nile.

The species is represented in the British Museum from the following places: Kitui (Hildebrandt), Machako's (Hinde), Lake Baringo (Delamere), Lado (Emin), Lake Stefanie (Donaldson Smith), Shoa (Antinori), Hawash (Lovat), Daira Aila (Pease), Sudan (Knoblecker).

At the Nguruman salt lake Fischer records the species as abundant in flocks of about twenty individuals, generally to be seen seeking their food amongst the grass, and remarks that they are noisy birds with a harsh cry somewhat resembling that of a *Hyphantornis*, but louder. The nests resemble, at first sight, those of that genus, and are suspended from twigs of acacia trees; but instead of having a single entrance hanging down from beneath they have two holes in the side, one apparently a shelter for the male, the other leading into the incubating chamber. At this lake Mr. Neumann has also procured specimens at Ndalalani and Pinnini. In the Ukamba country Dr. Ansorge obtained the species at Campi-ya-Simba, and Mr. Jackson at Njemps, on Lake Baringo, and at Elgeyu on the Kamassia range.

At the White Nile Emin found the species abundant, generally in small flocks, feeding on the ground near Lado and the neighbouring stations. Antinori met with it in the Kidsh country, and Heuglin records it from this district to as far down the Nile as the Sobat River.

Dr. Donaldson Smith procured it in the Musha Mountains to the north of Lake Rudolf and at Lake Stefanie. In Shoa the type of the species was discovered by Rüppell, and according to Antinori the species is plentifully distributed in flocks of eight to ten, and breed there in August. Further eastward Lord Lovat records it as "a noisy bird, seen in large numbers on the Hawash plain." Mr. Harrison also met with it here and at Tadechmulka, Mr. Pease at Erra Gota, Marko and Daira Aila, and writes: "These Black-billed Weaver Finches

PLOCEPASSER PECTORALIS

are bold, noisy, chattering birds, and appear to breed both in the autumn and spring, for at both of these seasons they were observed haunting their nests, which are untidy bunches of fine grass or teff attached to the ends of the lower branches of trees."

Plocepasser pectoralis. (Pl. 37, fig. 1.)

Philagrns pectoralis, Peters, J. f. O. 1868, p. 133 Inhambane.

Plocepasser pectoralis, Reichen. Vög. Afr. iii. p. 13 (1904).

Ploceipasser pectoralis, Sharpe, Cat. B. M. xiii. p. 247 (1890); Shelley, B. Afr. I. No. 470 (1896).

Adult male. Similar to P. mahali and P. melanorhynchus, from both of which it differs in having the crop mottled with large dark brown centres to the feathers. It resembles P. mahali in the under surface of the wing having the coverts and broad inner edges to the quills buff, and P. melanorhynchus in the black bill and the brown flanks. "Iris claret colour; bill black; tarsi and feet brown." Total length 6.5 inches, collmen 0.65, wing 3.8, tail 2.5, tarsus 1.0. σ , 28. 11. 98. Zambesi (Alexander).

Peters' Sparrow-Weaver ranges over Eastern Africa between 8° and 24° S. lat., from the Rufiji River to Inhambane.

This is the eastern representative of *P. mahali* in Southern Africa, and is represented in the British Museum from Tete (Kirk), Zumbo (Alexander), Npimbi (Whyte), Limondi (Sharpe), and Lindipe in Angoniland, where General Manning found it was known to the natives as the "Pelengaya."

The type was discovered by Peters at Inhambane.

Mr. Boyd Alexander, in his interesting notes on the birds observed by him during his expedition up the Zambesi, writes : "Wherever the woods were composed of *Copaifera mopane* this species was numerous, distributing itself in colonies, each selecting a clump of trees, whose outside branches the birds festooned from top to bottom, generally on the lee side, with their nests. These 'weaveries' were nearly always located near the confines of a village or close to a native path, their



l.Ploceipasser pectoralis 2.Anaplectes blundelli.3.A.erythrogenis.

PLOCEPASSER PROPINQUATUS

owners welcoming a passer by with loud choruses of mellow, musical chirps, which became long and boisterous on an important advent, such as a string of carriers passing by. These woods are very silent, few birds seem to care to haunt them, and but for these Weavers the monotonous silence would scarcely ever be broken. The same tree is resorted to year after year, and the old nests used as roosting places when the breeding season is over, and these undergo constant repairing. The nest, built in pendant branches about 15 to 20 feet from the ground, are composed of fine dried grass like dry hay, and generally lined with Guinea-fowl feathers, in construction resembling those of our House-Sparrow, and are also about the same size, the entrances of all the nests in one colony always facing one way, in an outward direction. They are, as a rule, untidy looking structures, no attempt at trimming being made, and remind one forcibly of hedgerows in England, past which havcarts have journeyed and left bunches of hay on the branches. In flight this bird looks much like some large Wheatear, its white rump being very conspicuous. During the breeding season the male sings rather prettily, melodious whistles being introduced into the usual string of musical chirps."

Dr. P. Rendall has procured the species at Monkey Bay on Nyasa Lake, and, as above mentioned, there are many specimens in the British Museum from other parts of Nyasaland. It has also been recorded from Undis (Fülleborn) and from the River Rufiji (Stuhlmann), in about 8° S. lat., which is the most northern range known to me for the species.

Plocepasser propinquatus.

"Plocepasser propinquatus, Oust." Shelley, Ibis, 1887, p. 6 Somali; Sharpe, Cat. B. M. xiii. p. 247; Shelley, B. Afr. I. No. 471 (1896); Reichen. Vog. Afr. iii. p. 14 (1904).

Type. Very similar to *P. melavorhynchus*, but differing in the bill being pale brownish, the sides of the head paler, with black sides to the white

throat much more distinctly marked; the feathers of the crop with pale brown centres; tail-feathers with broad white ends. Wing 3.75 inches. Somaliland (Paris Mus.).

The Somali Sparrow-Weaver inhabits Somaliland.

This is the representative of *P. melanorhynchus* in Somaliland, and is known, I believe, by the type only, which I met with in the Jardin des Plantes Museum, Paris, with the locality Somaliland written on the label. I find no other record of the species having been procured in Somaliland, or any other place, so it is probably only an abnormal variety of *P. melanorhynchus*.

Plocepasser donaldsoni.

Ploceipasser donaldsoni, Sharpe, Bull. B. O. C. v. p. 14 (1895) Somali ; id. P. Z. S. 1901, p. 620, pl. 36, fig. 2.

Plocepasser donaldsoni, Reichen. Vög. Afr. iii. p. 14 (1904).

Type. Upper parts brown, with the lower back and upper tail-coverts pure while; feathers of the head, above the line of the eye, dark brown, with rather narrow buffish edges, giving to this part a somewhat scaled appearance; back and sides of neck nearly uniform pale brown; feathers of the mantle and the lesser wing-coverts with broad dark brown centres; wings and tail dark brown, with buff edges to the feathers, broadest at the ends of the median and greater coverts and the ends of the tail-feathers, forming two bars on the wing; under tail-coverts and broad inner margins to the quills buff; a band of blackish feathers, tipped with buff, extends from the upper mandible under the eye and includes the upper ear-coverts; the head below this band is white, and is separated from the white chin and throat by an imperfect black band; breast buff, with pale brown centres to the feathers of the front of the chest and flanks; under tail-coverts white. "Iris red; bill black; legs grey." Total length 6-7 inches, culume 0.5, wing 3.7, tail 2.4, tarsus 1.0. σ , 14. 9. 95. Somailiand (Donaldson Smith). Adult female. Like the male. "Iris dark red." Wing 3.5. φ , 6. 12. 99.

Lake Stefanie (Donaldson Smith).

The Donaldson Sparrow-Weaver inhabits Western Somaliland and the adjoining country.

All the information I can find regarding this species is

that Dr. Donaldson Smith has collected two specimens, which are now in the British Museum. A male, the type of the species, he discovered in Somaliland, September 14, 1895, and the other, a female, he obtained in the hills to the west of Lake Stefanie, December 10, 1899.

Plocepasser superciliosus.

Ploceus superciliosus, Rüpp. Atlas Vög. p. 24, pl. 15 (1826), Abyssinia. Plocepasser superciliosus, Reichen. Vög. Afr. iii. p. 14 (1904).

Ploceipasser superciliosus, Sharpe, Cat. B. M. xiii. p. 248 (1890); Shelley, B. Afr. I. No. 472 (1896).

Adult male. Upper parts earth brown, with the forehead, crown and nape chestnut; the brown on the lower back and upper tail-coverts slightly more ashy than the mantle; wings and tail darker; median and greater coverts with buff ends forming two bars on the wing; quills edged with brownish buff, inclining to white on the inner secondaries; under wing-coverts and narrow inner edges to the quills buff; tail uniform brown; a complete broad white eyebrow; sides of head above the line of the gape rufous brown, with a white mark under the eye; below the line of the gape, and sides of upper neck, white, separated from the white chin and throat by a strongly marked band of black; under surface of body and the under tail-coverts white, of a slightly more ashy shade than the throat. "Iris light brown; bill brown; legs light brown." Total length 6-4 inches, culmen 0.65, wing 3-4, tail 2-7, tarsus 0-8. 3, 14. 1. 99. Laga Hardim (Lovat).

The Chestnut-crowned Sparrow-Weaver ranges over Northern Tropical Africa between the Equator and 17° N. lat.

The species has been received by Swainson from Senegambia, and by Verreaux from Casamanse, and there is a specimen in the British Museum labelled Senegal (Warwick). The next most western range known to me for the species is Gambaga; here, according to Capt. W. Giffard, it is abundant, and Mr. Boyd Alexander writes: "A pair was obtained at Gambaga. This species is locally distributed; it lives in small colonies." In the Niger district Thomson procured a specimen at Iddah, and Mr. Hartert has recorded it from Loko and Shongo.

PLOCEPASSER RUFOSCAPULATUS

In Central North-east Africa the type was discovered by Rüppell in Kordofan, where he found the species abundant, and Mr. Jackson has met with it close to the Equator in the Kamassia range of mountains, where it was plentiful and breeding in August.

In Shoa specimens have been collected by Harris, Antinori and Ragazze, and it is generally distributed over Abyssinia, having been met with in the south by Lord Lovat at Laga Hardem, and by Heuglin on the Blue and White Niles, in Semar, Bogos and Takar; but according to the latter naturalist it does not occur in the highlands above 6,000 feet. Their nests were artistically constructed of grass, lined with feathers and soft material, and were hung in groups from acacias at 15 to 25 feet from the ground. Two eggs he took from a nest, September 24, are described as having thin shells, were reddish white, with rosy red spots inclining to form a zone near the thick end, and measured 0.88×0.58 . The egg is figured, Heng. Orn. N. O. Afr. pl. 48, fig. 1.

Plocepasser rufoscapulatus.

 Plocepasser rufoscapulatus, Büttik. Notes Leyd. Mus. 1888, p. 238, pl. 9, fig. 2 Kasinga It.; Sharpe, Cat. B. M. xiii. p. 248 (1890); Shelley, B. Afr. I. No. 473 (1896); Reichen. Vög. Afr. iii. p. 15 (1904).

Type. Head and neck ashy buff; the crown entirely surrounded by a black marginal band separating it from the broad pale eyebrows; another less strongly defined black band from the forehead dips under the eye, and margins the upper part and back of the ear-coverts, a third distinct black band extends down the side of the throat; mantle deep cinnamon, passing into ashy brown on the lower back and upper tail-coverts; tail uniform light brown; wings blackish brown, with the lesser coverts cinnamon like the mantle; median and greater coverts with broad terminal white edges; widest on the median coverts, and forming two bars on the wing; quills margined with light brown, broadest and more sandy buff on the inner secondaries; under wing-coverts whitish ash, inner edges of quills sandy buff; chin and upper throat white; remainder of the under parts ashy white, with a sandy shade in front and darker ash on the flanks. Iris dark brown; bill pale

SHARPIA

horn colour; feet and claws yellowish horn colour. Total length 6.2 inches, culmen 0.75, wing 3.8, tail 25, tarsus 0.8.

The Red-mantled Sparrow-Weaver inhabits the Upper Cunene district.

The species was discovered by Van der Kellen at the Kasinga River, February 27, 1887, and is now in the Leyden Museum. I believe the species to be known by the type specimen only.

Genus IX. SHARPIA.

Bill slightly deeper than broad, much compressed at the sides, especially of the culmen, which is somewhat angular, with the base forming an acute angle on the forehead; masal-orifice at the end of a groove just in front of the frontal feathers. Back of head and neck with a few hair-like plumes. Wing with broad whitish ends to the median and greater coverts, forming two bars as in *Plocepasser*; some whitish edges to the inner secondaries; remainder of upper parts blackish brown, with the rump whitish yellow or rufous. Primaries 1 about one-third of 2; 3 and 4 longest. Tarsi, feet and claws moderate, pale brown.

Sharpia, Bocage, Jorn. Lisb. 1878, p. 258 S. angolensis.

The genus is represented by two species, one from Benguela and the other from St. Thomas Island. It resembles the Ploceus group of genera in having a few hair-like nuchal plumes, which character is sometimes rather difficult to see, but is present in this and all the following genera of the *Ploceidæ* and is apparently absent from all the previous genera, with the exceptions of *Spermospiza* and *Amblyospiza*.

The genus, like many of those that follow, is well marked only by the pattern of the plumage. The two species I refer to *Sharpia* are not strikingly similar, but would be quite out of place in any of the other divisions.

KEY TO THE SPECIES.

a. Upper parts and sides of head blackish brown, mottled down the centre of back with white; rump and upper tail-coverts yellowish white

angolensis.

Type.

Sharpia angolensis.

Sharpia angolensis, Bocage, Jorn. Lisb. 1878, p. 258 Caconda;
 Shelley,
 B. Afr. 1. No. 474 (1896);
 Reichen. Vög. Afr. iii. p. 28 (1904).
 Ploceus angolensis, Shelley, Ibis, 1887, p. 18, pl. 1, fig. 2.

Anaplectes angolensis, Sharpe, Cat. B. M. xiii. p. 413 (1890).

Adult. Upper parts dark sepia brown, mottled on the back with yellowish white; a band of the same colour across the lower back; upper tail-coverts ashy brown; median wing-coverts with broad, and the greater coverts narrow, white ends, forming bars on the wings; under wing-coverts and inner margins of quills white; sides of head dark brown like the crown; lower cheeks and the entire under parts white, with a slight yellow tinge on the middle of the breast. "Iris brick red; bill blackish; feet brown." Total length 5-5 inches, culmen 0.75, wing 3.0, tail 1.9, tarsus 0.95. 4, 82. Caconda (Anchieta).

The Angola Bar-winged Weaver inhabits Benguela.

Anchieta discovered the species at Caconda, where he obtained three specimens, one of which is now in the British Museum. According to his notes it is known to the natives as the "Sole."

Sharpia sancti-thomæ.

Sycobius sancti-thomæ, Hartl. Rev. Zool. 1848, p. 109 St. Thomas Isl.; Hartl. Verz. Handl. 1850, pp. 30, 54, pl. 9.

Sharpia sancti-thomæ, Shelley, B. Afr. I. No. 475 (1896); Reichen. Vög. Afr. iii. p. 29 (1904).

Heterhyphantes sancti-thomæ, Sharpe, Cat. B. M. xiii. p. 418 (1890); Bocage, Jorn. Lisb. 1904, p. 80 St. Thomas Isl.

Adult male. Crown and back of head black; mantle and tail dark brown, washed at the edges of the feathers with yellow; lower back and upper tail-coverts rufous yellow; wings dark brown, with large terminal yellowish white patches on the outer webs of the median and greater coverts, forming two bars on the wing; quills edged with olive; forehead, sides of head, sides and front of neck rufous yellow or rust colour, gradually shading into buff on the chin; breast and under tail sandy buff, fading into white down the centre of the breast. Iris, bill and legs brown. Total length 5.5 inches, culmen 0.75, wing 3.0, tail 1.9, tarsus 0.95. σ , 9.90. St. Thomas Island (F. Newton).

Female. Differs in the upper parts and side of head being paler olive

ANAPLECTES

brown, shading into rufous brown on the upper tail-coverts; pattern of wings and tail as in the male; a broad yellowish white eyebrow; under parts white, washed with olive brown on the crop and flanks.

The St. Thomas Island Weaver is apparently restricted to the island of that name.

The type of the species was discovered by Weiss, and since his visit there many naturalists have procured specimens, showing that it is evidently abundant on the island; but I find very little recorded regarding its habits. Prof. Bocage remarked in 1891 that all the specimens he had received came from the northern and eastern portion of the island, where it is known to the natives as the "Tchim-tchim-tcholo." He describes the nest as being carelessly constructed of fibres from the palm trees, and roots, with several entrances leading into one passage; and the egg is of a lengthened oval form, uniform bluish green and measuring 0.92×0.6 .

Genus X. ANAPLECTES.

Bill red or yellow, rather broad, being as broad as deep at the nostrils; culmen smooth, somewhat flattened, and very slightly curved; cutting edges of mandibles straight; nostrils open at the end of a groove and are exposed. Wing pointed; primaries 1 a third of the length of 2; 2 not longer than 6; 3 one of the longest; 10 falls short of tip of wing by the length of the tarsus. Tail square. Tarsi, feet and claws moderate.

The genus is confined to Tropical Africa and comprises two well-marked species. These are subject to variations of plumage not yet accounted for, three of which have received the following names: A. erythrogenys and A. blundelli, varieties of A. melanotis, and A. gurneyi, a variety of A. rubriceps.

My reason for not admitting them to be species or subspecies is because they occur only within the range of the species they most closely resemble.

(February, 1905.

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Type.

ANAPLECTES MELANOTIS

KEY TO THE SPECIES.

Males in full plumage.
melanotis. 🧭 🗋
blundelli.
erythrogenys.
Males in winter, females and young birds.
Males in full plumage.
rubriceps. 🔮 🗸
-
gurneyi 👶
Males in winter, females and young birds.

Anaplectes melanotis. (Pl. 37, vars., figs. 2, 3.)

Ploceus melanotis, Lafr. Rev. Zool. 1839, p. 20 Senegal; id. Mag. Zool. 1839, pl. 7.

Anaplectes melanotis, Sharpe, Cat. B. M. xiii, p. 413 (1890); Shelley, B. Afr. I. No. 476 (1896); Nehrkorn, Kat. Eiers. p. 128 (1899) egg; Grant, Ibis, 1904, p. 258 Upper Gallaland; Reichen, Vög. Afr. iii. p. 26 (1904).

Ploceus erythrocephalus, Rüpp. Syst. Uebers, pp. 71, 76 (1845) Shoa.

Ploceus leuconatus, Müll Naum. pt. iv. p. 28 (1851).

Euplectes pyrrhocephalus, Heugl. Syst. Uebers, p. 39 (1856) nom. nud.

Ploceus hæmatocephalus, Württ. Naum. 1857, p. 433 Fazogl.

Var. a.

Anaplectes blundelli, Grant, Ibis, 1900, p. 132 Beni Schongul; Reichen. Vög. Afr. iii, p. 28.

Var. b.

Calyphantria erythrogenys, Fisch. and Reichen. J. f. O. 1884, p. 181 Maurui, Pare, Lado.

Anaplectes rufigena, Shelley, B. Afr. II. p. 341 (1900) Chiuta.

Adult male. Forehead, crown, neck and front of chest vermilion; back and upper tail-coverts brownish ash, often mottled with red on the foremantle and upper tail-coverts; tail slightly browner, with red edges to the feathers; wings dark brown, with red edges to the quills, greater coverts and ends of the median coverts, the pale edges fading into white on the inner feathers; inner edges of quills and the under wing-coverts whitish,

the latter tinted with red, and changing into blackish brown on the pinion; entire sides of head and the chin black; breast and under tail-coverts white, with a variable amount of red on the front of the chest. "Iris brown; bill red; feet dusky brown." Total length 6 inches, culmen 0.7, wing 3.2, tail 2.2, tarsus 0.8. z, 9, 1, 84. Redjaf (Emin).

Adult female. Differs in having no red on the head and neck; top and sides of head ashy brown like the back; under parts white, with a faint ashy shade across the lower throat and fore-chest. "Iris brown; bill orange red; legs dusky brown." Wing 3.3.

Type of A. blundelli. Differs from the male above described only in having the mantle darker; blackish brown of the same colour as the least wing-coverts. Total length 5.7 inches, culmen 0.7, wing 3.45, tail 2.2, tarsus 0.8.

Type of A. rufigena. Differs from the male first described in the chin, cheeks and stripes on the ear-coverts being vermilion. Total length 5.4 inches, culmen 0.7, wing 3.3, tail 2.2, tarsus 0.8.

The Red-winged Anaplectes inhabits Tropical Africa southward from Senegambia and Abyssinia to Benguela and the northern portion of British Central Africa.

I here include A. erythrogenis (Reichen.) and A. blundelli, Grant, but it should be remarked that the former is known only from the Tanganyika Plateau, Maurui, Pare and Lado, and the latter by the type from Beni Schongul, near the head-waters of the Blue Nile. I have figured each of these forms to show what characters are apparently not of specific value in the genus *Anaplectes.* It may be remembered that Dr. Butler has proved that the Quelea russi plumage is at times assumed by both Q. quelea and Q. athiopica, yet many species are justly separated upon much less marked characters. This is the great difficulty one has frequently to contend with. I regard as species, birds which have a well-defined range and either a constant marked form of some of its parts, or a distinguishing pattern in one of the stages of plumage; as a subspecies, when the bird has a well-defined range but is distinguishable from its nearest ally in the shade of colouring only or in its size; as a variety, when it has no distinctly different range from that of its near

ANAPLECTES MELANOTIS

ally, but may, as in the present instance, have fairly wellmarked characters which possibly depend solely upon the age, food, or health of the specimen when killed, for we seldom have the chance of properly studying the effect of the moult.

The type of A. melanotis came nominally from Senegal. Verreaux received the species from Casamanse, and on the Gold Coast Mr. Boyd Alexander observed it occasionally, but did not procure an example. In the Paris Museum there was one of Gujon's specimens labelled "Gaboom," and this is all that is known to me regarding the species in West Africa to the north of the Congo; but it appears to be fairly plentiful in Angola and Benguela, specimens having been collected in Angola (Schütt) and at the Kuango River (Mechow). In Benguela, according to Anchieta, it is abundant on cultivated lands, and is known to the natives as the "Genge" at Quindumbo and as the "Quiriandendi" at Galanga.

In Eastern Africa these birds have been met with as far south as Chinta on the Tanganyika Plateau, to the north-west of Lake Nyasa, where the type of *A. rufigena* was procured by Sir Alfred Sharpe. The oldest name for this variety is *A. erythrogenis* (Reichen.), the types of which were collected by Fischer at Maurui and in the Pare highlands. That variety has also been obtained in Angola (Schütt), at Lado (Emin) and at Moschi (Neumann).

The typical form of *A. melanotis* has been procured at the Lugoma stream in the Marungu country by Böhm, who also found it breeding at Kakoma during the latter half of May. Specimens have also been obtained in the Unyamwesi country (Emin), in Ugogo (Preun), at Lake Naiwasha (Fischer), on Kilimanjaro and at Muansa (Neumann), at Mosongoleni (Ansorge), and by Mr. Jackson on Mount Maunga in Teita, at Elgeyu on Lake Baringo, in the Kamassia Mountains, and from the late expedition to the Ruwenzori Mountains he

received a specimen procured at Kigoma. In the British Museum the species is well represented from the Upper White Nile, Somaliland, Southern Abyssinia and Shoa. Emin has procured specimens at Kiri and Muggi and remarks that it is scarce near Lado, but extremely abundant towards Uganda. He found four or five of their beautifully woven graceful nests, and describes the eggs as uniform green.

Heuglin found the species inhabiting the Gazelle River and met with it as far north as Southern Sennar. He remarks that the autumn moult takes place in November, when the males pass out of their bright plumage into one resembling that of the females and young birds. In August they suspend their oval nests from the twigs of high trees; are shy birds frequenting the tops of the forest growth in small family parties, but mix with other Finches to drink on the banks of the pools and rivers. The eggs collected by Emin are described by Mr. Nehrkorn as blue or olive green, measuring on an average 0.8×0.55 .

Anaplectes rubriceps.

Ploceus rubriceps, Sundev. Œfv. Vet. Akad. Förh. Stockh. 1850, p. 97 Limpopo.

Anaplectes rubriceps, Sharpe, Cat. B. M. xiii. p. 411 (1890); Shelley, B. Afr. I. No. 478 (1896); Reichen. Vög. Afr. iii. p. 25 (1904).

Malimbus rubriceps, Elliot, Ibis, 1876, p. 466, pl. 13, fig. 2.

Sharpia ayresi, Shelley, Ibis, 1882, p. 353, pl. 7, fig. 2 Tatin R.

Var. a.

Ploceus gurneyi, Shelley, Ibis, 1887, p. 17, pl. 1, fig. 1 Caconda.

Anaplectes gurneyi, Sharpe, Cat. B. M. xiii, p. 412 (1890); Shelley, B. Afr. I. No. 477 (1896); Reichen, Vög, Afr. iii, p. 26 (1904).

Adult male. Head, neck and entire throat vermilion; back uniform greyish ash, usually mottled with red and black towards the neck; tail dusky brown with narrow yellow edges to the feathers; wings blackish brown, with yellow edges to the quills, greater coverts and ends of the median coverts; these edges are generally paler, often whitish on the inner quills and the coverts; inner edges of the quills and the under wing-coverts white, with the edge of the bend of the wiugs yellow; a few black feathers in front of the eye; breast below the red of the neck, thighs and under tail-coverts white. "Iris brown; bill light coral, legs and feet brown" (Alexander). Total length 5-6 inches, culmen 0.7, wing 2.15, tail 2.1, tarsus 0.8. \mathcal{J} , Transvaal (F. Francis).

Adult female. Upper parts brownish ash, shading from the mantle, which has yellowish edges to the feathers, into dull yellow on the head; tail and wings with yellow edges to the feathers; lesser wing-coverts like the mantle; median coverts with broad dull yellowish huff ends; the edges of the other wing-feathers deep yellow, fading into white on the inner secondaries; under coverts and inner margins to the quills white, the former tinted with yellow; sides of head yellow, paler than the crown; chin and throat whitish yellow, darkest on the lower throat; breast, thighs and under tail-coverts pure white. "Iris reddish brown; bill orange; legs flesh-colour." Total length 5-1 inches, culmen 0-6, wing 3-1, tail 1-9, tarsus 0-8. 9, 17. 6. 85. Lehtaba (W. Ayres).

Type of Sharpia ayresi. Similar in colouring to the female, but differing in the yellow of the crown being slightly darker, with a trace of approaching red; forehead margined on the front and sides with black. Feathers of wings and tail worn. \mathcal{J} , 10. 12. 80. Tatin R. (Jameson).

Type of A. gurneyi. Similar to the male first described, but differs in having the ear-coverts black, slightly washed with red, the chin, space in front of the eyes, upper portion and front of cheeks black. Wing 3-1. σ , 7. 78. Caconda (Auchieta). In another specimen the whole of the cheeks and ear-coverts are jet black. Nyasaland (Manning).

The Yellow-winged Anaplectes inhabits Benguela, and ranges over Eastern Africa from the Tropic of Cancer to 6° S. lat.

In the British Museum there are examples from Komati Poort (Francis), Lehtaba River (W. Ayres), Limpopo (Wahlberg), Tatin River (Jameson), Fort Chiquaque (Sowerby), Zambesi (Alexander), Zomba, Fort Hill and Mpimbi (Whyte), and two specimens of *A. gurneyi* from Tanganyika Plateau (Manning) and Caconda (Anchieta). These latter, according to Prof. Bocage, are only varieties of *A. rubriceps* and as such I am here treating them.

In Benguela the typical form has been obtained at Quellengues and in Capangombe, and *A. gurneyi* in Quissange, at Caconda and Humbe; the former, according to Anchieta, is known to the natives of Quellengues as the "Ulojanja," and the latter, at Humbe, as the "Quicengo." I do not find any further information regarding its occurrence on the western side of Africa. The type of *A. gurneyi* came from Caconda. The most southern range known to me for the species is Komati Poort in the Transvaal, where Mr. Francis found colonies of nests of this species, of *Hypantornis spilonotus* and *Textor niger* all in one tree, and took a photograph of them which has been beautifully reproduced (Faun, S. Afr. B. i. p. 76), showing the lengthened entrance passage to the nests of *A. rubriceps*, which distinguishes them at a glance from the more rounded nests of *H. spilonotus*. He writes: "Common in the locality and fairly distributed right through the eastern border of the Transvaal."

In the month of July Mr. W. Ayres shot two hens out of a flock of six or eight of these birds, all of which were in the yellowish white plumage, at Rovi-rand. The type of the species was discovered by Wahlberg at the Limpopo River.

To the north of the Limpopo, Mr. T. Ayres writes : "This is by no means a common bird. We found it breeding at the Tatin; it makes a rough, retort-shaped nest, which it hangs, mouth downwards, from the outer twigs of rather tall trees. Sometimes a new nest is hung on the tube of the last year's structure. Mr. Jameson found a nest to the north of the Umfuli in October, with two blue eggs in it, and at the Tatin we pulled down one of the double nests, and Mr. Jameson, on trying to put his hand up the tube, very nearly got bitten by a snake, which was lying in the nest and had swallowed the old bird as well as her blue eggs. It is evident, therefore, that nests of this shape do not always keep out snakes." The males were apparently all breeding in immature or winter plumage, for Jameson informed me that he never saw a specimen with a red head while he was in South Africa, and the type of Sharpia ayresi, a male shot December 10, differs from the female plumage in having the forehead margined with blackish brown.

The only specimen met with by Mr. Sowerby, at Fort Chiququa, in Mashonaland, November 9, is a male in full plumage, but Mr. Guy Marshall writes: "This handsome species is common about Salisbury, occurring in pairs in the bush, where it searches the trees and bushes assiduously for insects, often hanging back downwards, like a Tit." The egg he describes as pale greenish blue, measuring 0.8×0.6 . From the Zambesi Mr. Boyd Alexander writes : "A rather shy species, keeping much to the thick portions of the woods in little flocks of five or six birds, in which the male sex predominates to a very large extent. On nearly every occasion there were on an average four males to one female. The white flower of the baobab offer them a good deal of attraction, and it is a pretty sight to witness them attacking the pendent half-opened buds as they hang head downward from some branch above, the immaculate whiteness of the flowers bearing a striking contrast to their vermilion-feathered breasts. From this habit of suspending themselves from branches, the white feathers become very grimy-looking.

"The amount of vermilion on the breasts of individuals varies considerably, while in many of our specimens the upper tail-coverts are washed with it as well as the feathers here and there on the abdomen and thighs. In freshly moulted females the white edgings to the secondaries are broad and conspicuous, but these disappear through abrasion."

To the north of the Zambesi Mr. Whyte has procured specimens at Zomba and Mpimbi in the Shiré district, and at Fort Hill on the southern end of the Masuku Range; a little further north, on the Tanganyika Plateau, Gen. Manning obtained a full plumaged example of *A. gurneyi*, the only

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specimen of this form yet recorded from beyond the limits of Benguela. From German East Africa typical *A. rubriceps* has been procured at Langenburg and Songea (Fülleborn), Ungoni (Booth), Morogoro (Emin), Mbusini (Fischer and Stuhlmann), and the latter naturalist informs us that he found it known to the natives as the "Gongo."

Genus XI. MALIMBUS.

Bill moderately long and stout, with the culmen rounded at the base; nasal orifice exposed and of a horizontal oval form; chin-angle rounded. Wing rounded; primaries 1 nearly half the length of 2; 2 shorter than 6; 3, 4 and 5 longest and about equal. Tarsi and feet strong. Plumage black, with some red. In adults the bill is black or horny white; in immature birds both the plumage and bill are browner, and the tarsi and feet sometimes brownish flesh-colour.

	Type.
Malimbus, Vieill. Ois. Chant. p. 71, pl. 42 (1805)	M. malimbicus.
Sycobius, Vieill. Analyse, p. 33 (1816).	M. malimbicus.
"Ficophagus, Vieill." Gray, Gen. B. ii. p. 351 (1849)	M. malimbicus.
Atalocrous, Elliot, Ibis, 1876, p. 458	M. racheliæ.

The genus is confined to Tropical Africa and comprises eight known species. It has been divided into two, and consists really of three equally well-marked groups, which may be readily distinguished by the colour of the under tail-coverts. In one the under tail-coverts are black, in the second they are red, and in the third group they are yellow.

KEY TO THE SPECIES.

a. Plumage entirely black and red.

a¹. Under tail-coverts black.

a^2 . Under parts entirely black; forehead, in males red,	
in females black.	
<i>a</i> ³ . Red on head more orange scarlet	rubricollis.
b ³ . Red on head more crimson	bartletti.
b^2 . Some red on the throat.	
c ³ . Sides of head mostly red; forehead and hind neck,	
in males black, in females red	malimbicus.
d^3 . Sides of head mostly black.	
a^* . Crown and entire throat red	cassini.
b^{*} . Entire head and upper throat black	

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b¹. Under tail-coverts red.

	c ² . Breast black;	lower throat red			scutatus. 🚽 🗧
	d^2 . Breast red				erythrogaster. 3 5-5
Ь.	Plumage with some	yellow; under tail	-coverts	yellow .	racheliæ. 3. 5

Malimbus rubricollis.

Ploceus rubricollis, Swains. An. in Menag. p. 306 (1838) Malimba.

- Malimbus rubricollis, Sharpe, Cat. B. M. xiii. p. 478 (1890); Nehrkorn, Kat. Eiers. p. 131 (1899) *egg*; Reichen, Vög. Afr. iii. p. 19 (1904).
- Tanagra malimbica, Dand. Ann. Mus. i. p. 151, pl. 10, fig. 2 (1802, p. nec 3).
- Malimbus malimbicus, Oberholser, Pr. U.S. Nat. Mus. xxii. p. 17 (1899) Camaroons.

Malimbus cristatus, Vieill. Ois. Chant. p. 71, pl. 43 (1805, ? nec 3).

"Textor malimbus, Temm." Licht. Verz. Doubl. p. 24, note (1823) nom. nud.

Malimbus malimbus, Shelley, B. Afr. I. No. 479 (1896).

Fringilla textrix, Licht. Verz. Doubl. p. 24, note (1823) nom. nud.

Euplectes rufovelatus, Fraser, P. Z. S. 1842, p. 142 Fernando Po.

Textor rufovittatus, Eyton (laps. cal.), Cat. Coll. p. 245 (1856).

Sycobius nuchalis, Elliot, Ibis, 1859, p. 393 Gaboon.

- "Malimbus occipitalis, Elliot," Gray, Handl. B. ii. p. 43 (1870) nom. nud.
- Malimbus rubricollis centralis, Reichen. Orn. Monatsb. 1893, p. 30, Nduluma ; id. Vög. Afr. iii. p. 21 (1904).

Malimbus centralis, Shelley, B. Afr. I. No. 481 (1806).

Adult male. Black, with the entire forehead, crown, back and sides of neck and end portion of ear-coverts rich scarlet; under surface of quills ashy black, slightly paler on the inner margins. "Iris hazel; hill and feet black" (Jackson). Total length 6.9 inches, culmen 0.8, wing 4-25, tail 2-7, tarsus 1.0. σ , 12. 11. 02. Fernando Po (Alexander).

Adult female. Differs only in the forehead and front of crown being black. Wing 4.0. 9, 21, 10, 02. Fernando Po (Alexander).

Immature. Similar to the female, from which it differs in having the forehead, front of crown, sides of head, chin and throat mottled with black and scarlet. Bill and feet brown.

Swainson's Malimbe ranges from Fernando Po and Camaroons to the Congo and eastward into Uganda.

On the island of Fernando Po the species is, according to Mr. Boyd Alexander, "Common at the foot of the hill-ranges,

resorting to the thick forest-trees." On this island Fraser procured the type of his *Euplectes rufocelatus*, and wrote : " A very good songster. These birds, although in deep moult (in June) appeared to be pairing." The egg is described by Mr. Nehrkorn as being of a dark bluish green colour and measuring 0.96×0.64 .

The species is apparently scarce in Camaroons, but ranges eastward into Uganda, where Mr. Jackson and Sir Harry Johnston have both collected specimens, which are now in the British Museum. These latter specimens should belong to the *M. rubricollis centralis*, Reichen., the type of which came in the Emin and Stuhlmann Collection from Nduluma; but in my opinion they cannot be distinguished from the true *M. rubricollis*.

In Gaboon the species was met with by Du Chaillu at Cape Lopez and the Camma River. One of Verreaux's specimens from this country, now in the British Museum, is the type of *Sycobius nuchalis*, Elliot.

The type of the species was procured on the Loango Coast at Malimba by Perrein and was figured by Vieilliot as the female of *Malimbus cristatus* (Ois. Chant. pl. 43). On the Lower Congo the species has been met with by Lucan and Petit at Condé.

Malimbus bartletti.

 Malimbus bartletti, Sharpe, Cat. B. M. xiii. p. 479 (1890) Gold Coast;
 Shelley, B. Afr. I. No. 480 (1896); Reichen. J. f. O. 1902, p. 36 Togo.

Malimbus rubricollis bartletti, Reichen. Vög. Afr. iii. p. 20 (1904).

Malimbus malimbicus (non Daud.), Bartl. Mon. Weaver-birds, pt. iv. p. 1, pl. 1 (1889).

Adult male. General plumage glossy black, with the forehead, crown, back and sides of neck velvety crimson, these crimson feathers having the base, or a bar near the base, yellow. "Iris, bill and lcgs black" (Kemp).

Total length 7.4 inches, culmen 0.8, wing 4.1, tail 2.5, tarsus 1.0. ♂, 21.7.01. Prashu (Alexander).

Adult female. Differs from the male in the forehead and front half of the crown being velvety black, and no yellow base to the feathers. Wing 4.1, \circ , 15, 9, 00. Kumassi (Alexander).

Immature male. Like the female, but the fore part of the crown is gradually shading into red, without shedding the feathers, and the yellow base of the feathers appears to be the last change. 3, 25, 2, 72. Abouri (Shelley).

Bartlett's Malimbe ranges from Sierra Leone to the Niger River. This is the northern representative of M. rubricollis, with which it has been frequently confounded, and was first separated from that species by Dr. Bowdler Sharpe in 1890.

The most northern and western range yet known for the species is Sierra Leone, where Mr. Kemp found it "fairly common, frequenting the tops of high trees." At the Sulymah River specimens have been collected by Demery, and according to Mr. Oberholser it is known to the natives of Liberia as the "Way-see-eh." Dr. Büttikofer met with the species frequenting the clearings, where it would perch on the isolated trees and stumps to watch for insects, and he remarks that his Liberian specimens agree too closely with one from the Congo to enable him to distinguish *M. bartletti* from *M. rubricollis.* The fairly good series of these birds in the British Museum is quite sufficient to enable one to appreciate the characters for separating these two forms.

It is, apparently, generally distributed over the more thickly wooded parts of the Gold Coast and Togoland. I and my friend, T. E. Buckley, met with it at Abrobonko near Cape Coast and in the forest around Abouri, inland from Accra. Mr. Boyd Alexander obtained specimens at Prahsu, Fumsu, Kwissa and Kumassi, and writes: "This species keeps to the thick portions of the forest, and is seldom seen (like other Weaver-birds) in open spots." In Togoland it has been

procured at Batja by Mr. Baumann. It has been recorded from the Lower Niger (Ansorge).

Malimbus malimbicus.

- Tanagra malimbica, Daud. Ann. Mus. Paris, i. p. 151, pl. 10, fig. 1 (1802, *J* nec 2).
- Malimbus malimbicus, Sharpe, Cat. B. M. xiii, p. 480 (1890); Nehrkorn, Kat. Eiers. p. 131 (1899) egg; Reichen, J. f. O. 1902, p. 36 Togo; id. Vög. Afr. iii. p. 21 (1904).
- Malimbus eristatus, Vieill. Ois. Chant. p. 71, pl. 42 (1805) Congo; Bartlett, Mon. Weaver-birds, pt. iv. p. 7, pl. 2 (1889); Shelley, B. Afr. I. No. 482 (1896).
- "Sycobius nigrifrons, Temm." Hartl. J. f. O. 1855, p. 356 Rio Boutry.
- Sycobius rubriceps, Reichen. J. f. O. 1876, p. 209 Camaroons.

Malimbus rubriceps, id. Vög. Afr. iii. p. 22 (1904).

Adult male. General plumage glossy jet black; head somewhat crested and bright crimson like the throat, with the feathers surrounding the bill and eyes black. "Iris brown; bill and feet black" (Büttikofer). Total length 58 inches, culmen 0.6, wing 3.3, tail 2.3, tarsus 0.8. 3, 18.9.00. Fumsu (Alexander).

Adult female. Differs in having no crest, the red extending over the forchead, back and sides of neek and the entire sides of the head; chin and throat black, mottled with red, mostly on the lower throat. Wing 3.3. Accra (Sharpe's Coll.).

Young. Entire head black; lower throat washed with red. Bill never entirely black; plumage generally with a shade of brown.

The Crested Malimbe ranges from Liberia to the Congo.

The species has been procured by Demery at the Sulymah River, which, as with *M. bartletti*, is the most northern and western range yet known for these Weavers. Dr. Büttikofer met with them at Bavia and Paynville, frequenting the undergrowth of the forests and the bushes around old abandoned farms. They are plentiful in our Gold Coast Possessions and Togoland, but are probably contined to the forests, for I met with the species at Abouri only. Ussher's specimens came from the Denkera forest, and Mr. Boyd Alexander's from Prahsu and Fumsu. In Togoland Mr. Baumann has pro-

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cured specimens at Agome Tongwe and at Misahöhe; but the species has not yet been recorded from the country between Togolaud and Camaroons. From the latter district there are in the British Museum two of Crossley's specimens and one procured by Mr. C. L. Bates at the Rio Benito in the French Congo. An immature bird, apparently of this species, from Camaroons, has been described by Dr. Reichenow as *Sycobius rubriceps*, and I see he refers to it some of the specimens from Togoland. In Gaboon Du Chaillu met with the species at the Muni and Camma Rivers. On the Loango Coast the type was discovered by Perrein at Malimba. Falkenstein met with it at Chinchonxo, and there is a specimen in the British Museum from Landana, obtained there by my late friend Mr. T. Thomson.

The eggs of this species, according to Mr. Nehrkorn, are deep bluish green and measure 0.84×0.56 .

Malimbus cassini.

Sycobius cassini, Elliot, Ibis, 1859, p. 392 Gaboon.

Malimbus cassini, Elliot, Ibis, 1876, p. 461, pl. 13, fig. 1; Sharpe, Cat.
 B. M. xiii. p. 482 (1890); Shelley B. Afr. I. No. 483 (1896); Reichen,
 Vög. Afr. iii. p. 19 (1904).

Adult male. Forehead, crown, hinder half of the ear-coverts, upper half of the neck all round and entire front of the neck bright scarlet, remainder of the plumage black. "Bill black; feet and legs brown" (Elliot). Total length 6 inches, culmen 0.8, wing 3.5, tail 2.4, tarsus 0.8. Type.

Cassin's Malimbe inhabits Gaboon and Angola.

The type is one of Verreaux's specimens from Gaboon. I suppose Mr. Elliot quoted Verreaux's notes when he wrote: "Like the other species of the genus, it frequents the edges of the forests in small flocks, feeding chiefly on seeds. The nest is suspended from the branch of a lofty tree, is roughly made, and is entered by an opening in the side. The species

does not appear to be migratory." Marche found it at Fernand Vaz.

All that I know with regard to the occurrence of this bird in Angola is that Mr. T. Thomson sent me a collection from Loanda including an example of this species, which is now in the British Museum.

Malimbus nitens.

Ploceus nitens, Gray, Zool. Misc. i. p. 7 (1831) Sierra Leone.

Malimbus nitens, Sharpe, Cat. B. M. xiiii. p. 481 (1890); Kuschel, J. f. O. 1895, p. 331 egg ; Shelley, B. Afr. I. No. 484 (1896); Reichen, J. f. O. 1892, p. 36 Togo; id. Vög. Afr. iii. p. 19 (1904).

Sycobius nitens, Gray, Gen. B. ii. p. 352, pl. 87 (1849).

Adults. Lower two-thirds of throat (including the crop) crimson, varying from deep crimson almost into vermilion; remainder of the plumage black; feathers of the head, hind neck, mantle and front of chest jet black, with glossy edges to the feathers; remainder of the body, wings and tail more sooty black. Iris red; bill bluish horn-colour; feet dark grey. Total length 6 inches, culmen 0.85, wing 3:4, tail 2:3, tarsus 0:9. Fantee.

Immature. Head faintly mottled with a shade of crimson.

Gray's Malimbe ranges from 11° N. lat. over West Africa to the Congo and eastward into the Niam-Niam country.

The most northern range recorded for the species is the Cassini River (Fea) in Portuguese Guinea. M. Oustalet received a specimen from Los Island, and remarks that it agrees well with others obtained by M. Laurien at Cape Palmas. The type was discovered by Sabine at Sierra Leone, and is now in the British Museum. Demery procured specimens at the Sulymah River, and Dr. Büttikofer in Liberia, at Bavia, Schieffelinsville, Hill Town, and on Gallilee Mountain, and observed that they were less lively than their allies and rarely seen outside the forest.

In our Gold Coast Colony specimens have been collected at Wassaw (Blissett), Abrobonko and Denkera (Ussher), Boutry River (Pel), Kwissa (Alexander), Aguapin (Riis).

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Probably on the outskirts of this latter forest district Haynes procured the specimen, labelled in the British Museum "Accra," for it is essentially a woodland bird, and when I was there with T. E. Buckley we never saw it on the open Accra plains, but found it some twenty-five miles inland, abundant in the dense forest surrounding Abouri. In Togoland Dr. Büttner found a nest containing eggs, on April 8, at Bismarckburg, which he refers, I thing wrongly, to this species, for he describes the nest as "oval, with a rather short entrance passage and very similar to that of *H. cucullatus*. The eggs were of a vellowish or greenish ground with large rufous brown and violet spots, and measured about 0.9×0.65 inch." They probably belonged to Hypantornis cucultatus. In the comparatively little explored district between Togoland and Camaroons I find it recorded only from the Lower Niger (Ansorge); but in Camaroons Crossley procured two specimens, and according to Dr. Reichenow it is generally distributed over that country, where it is, however, rarer than M. scutatus. Mr. Sjöstedt also records the species as abundant at Bonge, Kitta, and Ekundu, and with young, able to fly in March. In Gaboon specimens have been collected at Cape Lopez (Laurien), Muni, Moonda and Camma Rivers (Du Chaillu). Falkenstein met with it on the Loango Coast, and no doubt it inhabits the wooded districts generally of West Africa, to as far east as the Niam-Niam country, where Bohndorff procured a specimen at Ndoruma, which is now in the British Museum.

Malimbus scutatus.

- Sycobius scutatus, Cass. Proc. Philad. Ac. 1849, p. 157 Sierra Leone; id. Acad. Philad. 1850, p. 297, pl. 41, figs. 1, 2.
- Malimbus scutatus, Sharpe, Cat. B. M. xiii. p. 482 (1890); Shelley, B. Afr. I. No. 485 (1896); Reichen. Vög. Afr. iii. p. 22 (1904).
- Malimbus rubropersonatus, Shelley, Ibis, 1887, p. 41, pl. 2, fig. 2 Gold Coast.

Malimbus scutopartitus, Reichen. J. f. O. 1894, p. 38 Camaroons; Shelley, B. Afr. I. No. 486 (1896).

Malimbus scutatus scutopartitus, Reichen. Vög. Afr. iii. p. 23 (1904).

Adult male. Forehead, crown, neck all round and the under tail-coverts searlet vermilion; remainder of the plumage glossy black; quills with their inner margins very slightly paler. "Iris brown; bill black; feet greyish brown" (Büttikofer). Total length 6:2 inches, culmen 0.6, wing 3.6, tail 2:3, tarsus 0.85. \mathcal{J} , Wassaw (Blissett).

Adult females. Differ in having the entire head black, the red being confined to the lower throat, crop and under tail-coverts. Wing 3.4. Fantee and Gaboon.

Variety, M. scutopartitus, Reichen. Differs only in the feathers down the middle of the red pectoral band being mottled with black. Wing 3.4. 9, Camaroons (Crossley).

Immature. Differs in having the bill pale brown; red of throat extends on to the chin; forehead and sometimes the crown is red, or mottled with red. Iris brown; bill pale brown; tarsi and feet brown. Wing 2.6 to 3.4. Four specimens, Fantee (Ussher.)

Nesting. Similar to the last, but differing in the tarsi and feet being flesh colour. Fantee (Higgins).

The Red-shielded Malimbe ranges from Sierra Leone into Gaboon.

The type was discovered by MacDowell at Sierra Leone, which is the most northern range known for the species, and there are a male and female from this locality in the British Museum. Demery met with it at the Sulymah River and Dr. Büttikofer at many places in Liberia, where he usually observed it in the forest glades. The type of *M. rubropersonatus*, which is now in the British Museum, is a young bird of this species; it was presented to me by my late friend, Governor Ussher, who received all his specimens of the present species from Denkera, an inland forest of Fantee. In the British Museum there are also specimens collected by Godfrey Lagden in Ashantee, and by Blissett at Wassaw. Pell procured the species at the Boutry River and Mr. Boyd Alexander obtained three examples at Fumsu; but it has not yet been recorded from Togoland.

(February, 1905.

MALIMBUS SCUTATUS

According to Dr. Reichenow (Vög. Afr. iii. p. 23), the typical M. scutatus ranges from Sierra Leone to the Niger, where it meets with a southern subspecies, M. scutatus scutopartitus, which ranges from the Niger into Gaboon. This latter form is distinguishable only by black markings on some of the feathers down the centre of the red shield-patch on the crop, which character is not a constant one, being well marked on a female procured by Crossley in Camaroons on February 9, 1871, and entirely absent in a male obtained by him on the same day. In a male from Onitscha (Forbes) there are a few black streaks towards the middle throat and one towards the chest, while his immature specimen, from the same locality, is a typically coloured M. scutatus. In only one of the Fantee birds I have examined have I found a trace of black on the red crop-patch. From the above observations I cannot look upon the type of S. scutopartitus as more than a variety of M. scutatus; but this variety apparently occurs most frequently in Camaroons birds; in a similar manner Anaplectes gurneyi seems to be most abundant in Benguela, and both are forms that it would be interesting to know more about, and study their moult in captivity.

Dr. Ansorge has procured specimens in April, May, and from August to December in the Lower Niger, and according to Dr. Reichenow it is a common species in Camaroons along the wooded slopes of the mountains, and he describes the nest as being of a retort shape, constructed of dry pliant rootlets and measuring 6.7 inches high by 4 wide, with the entrance passage 25 inches in length, hanging down and of looser structure than the oval part of the nest. He found five of these nests on one palm tree, hung at about 20 feet from the ground. The eggs, two in number, were pure white and measured 0.84×0.64 .

In Gaboon, specimens have been collected by Du Chaillu

at the Muni and Ogowé River, and by Marche at Fernand Vaz.

Malimbus erythrogaster.

Malimbus erythrogaster, Reichen, J. f. O. 1894, p. 37; 1896, p. 30, pl. 4, figs. 3, 2 Camaroons; Shelley, B. Afr. I. No. 487 (1896); Reichen. Vög. Afr. iii, p. 24 (1904).

Adult male. Upper part of head, neck and under surface of body vermilion, paler on the abdomen, thighs and under tail-coverts; sides of head, throat, back, wings and tail black; under surface of wing with a grey shade on the inner webs of the quills and on the greater coverts. Iris grey; bill black; feet pale horny brown. Total length 6.5 inches, culmen 0.8, wing 3.5, tail 2.0, tarsus 0.9. \mathcal{J} , 3. 11. 02, Jaunde (Zenker).

Adult female. Differs in having the sides only of the head black, the throat being pale vermilion.

The Red-breasted Malimbe inhabits the Lower Niger and Camaroons.

The types, a male and female, were discovered by Dr. Zenker at Jaunde, and specimens have also been recorded from Eastern Camaroons (Carnap) and the Lower Niger (Ansorge).

Malimbus racheliæ.

Sycobius racheliæ, Cass. Proc. Philad. Acad. 1857, p. 36 Muni R.; id. Journ. Ac. Philad. 1862, p. 185, pl. 23, fig. 3.

Malimbus racheliæ, Sharpe, Cat. B. M. xiii. p. 483 (1890) Gaboon; Sjöstedt, Sv. K. Vet. Ak. Handl. Stockh. 1895, p. 83, pl. 7 Camaroons; Shelley, B. Afr. I. No. 488 (1896); Reichen. Vög. Afr. iii. p. 24 (1904).

Adult male. Glossy black, with the crown orange shaded scarlet; sides of neck, front of chest and the crop yellow, the latter strongly washed in the centre with scarlet; under tail-coverts uniform yellow. Total length 5.5 inches, culmen 0.7, wing 3.1, tail 2.4, tarsus 0.8. 3, Gaboon (Walker).

Adult female. "Glossy black, with the lower throat and crop saffron yellow shaded with cochineal red in the middle and with white bars to these feathers; under tail-coverts pale saffron yellow. Total length 5.8, culmen 0.65, wing 3.1, tail 1.9, tarsus 0.7" (Sjöstedt).

Rachel's Malimbe inhabits Camaroons and Gaboon.

CINNAMOPTERYX

The most northern range known for the species is the Ndian River in Camaroons, where Mr. Sjöstedt procured a hen bird, the first specimen of this sex known. It had its nest suspended, at a height of 25 feet, from the interlaced twigs of two trees. The nest was of a retort shape, very similar to that of *M. scutatus*. The type, an adult male, was discovered at the Moonda River by Du Chaillu, who also met with the species at the Muni or Danger River. In the British Museum there is one of Mr. Walker's collecting from Gaboon.

Genus XII. CINNAMOPTERYX.

Similar to *Malimbus* in structure, but differs in the colouring, there being no red on the plumage. The bright colours are yellow and cinnanon; the former, when present, is confined to the interscapular region; wings and tail uniform black (excepting in the female of the type species). Sexes sometimes alike in plumage.

Type.

Cinnamopteryx, Reichen. Zool. Jahrb. i. p. 126 (1886) C. castaneofusca. The genus comprises three species and is confined to West and Central Africa. They breed in colonies in the higher trees.

KEY TO THE SPECIES.

a. Wings and tail with pale edges to the feathers; general plumage olive shaded brown with some	
dark streaks	castaneofusca, 🔉 . 🗐 👘
b. Wings and tail uniform black.	
a ¹ . Head entirely black.	
a ² . Back entirely chestnut	castaneofusca, 3 .
b^2 . Back black with a yellow interscapular patch;	
sexes similar.	0
a ³ . Abdomen chestnut	tricolor.
b^{s} . Abdomen black	
b. Head rufous.	tricolor, juv.

Cinnamopteryx castaneofusca.

- Ploceus castaneofuscus, Less. Rev. Zool. 1840, p. 99 Casamanse; Reichen. Vög. Afr. iii. p. 53 (1904).
- Cinnamopteryx castaneofusca, Sharpe, Cat. B. M. xiii. p. 472 (1890); Shelley, B. Afr. I. No. 565 (1896); Nehrkorn, Kat. Eiers. p. 131 (1869) cgg.

Ploceus isabellinus, Less. Rev. Zool. 1840, p. 226 Sierra Leone.

Adult male. Head, neck, wings, upper tail-coverts, tail, chest and thighs black; back, abdomen and under tail-coverts deep chestnut. Iris and legs brown; bill black. Total length 5.9 inches, culmen 0.8, wing 3.15, tail 2.1, tarsus 0.9. \mathcal{J} , 30. 1. 72, Abrobonko (Shelley).

Adult female. Upper parts brown, inclining to olive towards the crown and to rufous on the upper tail-coverts; top of head and the mantle with obscure dark centres to the feathers; tail and most of the wings brownish black; lesser coverts like the back; edges of median and greater coverts and of the inner secondaries buffy brown, the other quills more narrowly edged with brown; under wing-coverts buffy brown like the under parts generally; sides of crop like the car-coverts, darker and less rufous; chin, throat and centre of breast paler and the latter part yellower. Iris brown ; bill brown fading into flesh-colour on the lower mandible; legs brown. Wing 2:85. 2, 24. 2. 72, Abouri (Shelley).

The Chestnut-and-black Weaver ranges over West Africa from Senegambia to the Congo.

The type is a male specimen from Casamanse. A hen bird procured at Sierra Leone was described by Lesson, later in the same year, 1840, as *Plocens isabellinus*; in this district MacDowell obtained an adult male, and Mr. Kemp has found these Weavers breeding at Bo in October and showed me one of their eggs, which is of a uniform pale blue and much elongated. According to Dr. Büttikofer the species is common throughout Liberia, frequenting the neighbourhood of human habitations in preference to the deep forests. In habits it resembles *Hyphantornis cucullatus*, but apparently prefers less elevated breeding places, such as reed-jungles, where they attach their nests to the tops of one or two of the shafts. One December evening, at Robertsport, his attention was

CINNAMOPTERYX CASTANEOFUSCA

attracted by an unusual noise, caused by a great number of these birds flying to and fro, "talking palaver," as his boy aptly suggested; for early next morning a cloud of them came and took possession of the tree and immediately began constructing their hanging nests, and continued actively at work the whole day, and by sunset he counted fifty-four of their nests apparently finished, when the birds flew off together to roost elsewhere. The following morning, soon after they had come back, he heard again a great chattering and he saw the birds examining the nests from all sides, and then, as if by a signal, they all took flight together to a cane-grove on the other side of the station, where they immediately commenced building other nests, which they fastened to the tops of the canes from 8 to 12 feet from the ground. A few days after they had laid their eggs, two to three in number, and he never again saw these birds return to the tree where they had first commenced building, having, he suggests, possibly been scared away from the tree by a colony of ants or a snake they may have discovered among the boughs. The eggs were uniform bluish green.

Drs. Reichenow and Lühder found the species breeding in colonies near Abokobi, and remark that the nests were of an oval form, hung from reeds and bamboos at an elevation of from 5 to 20 feet, and the eggs, two in number, were pale blue and measured 0.92×0.64 . Mr. Boyd Alexander obtained the species at Pong, and writes: "Breeds in May. The nests, constructed of coarse grass-blades and lined with fresh leaves, are suspended underneath the fronds of the palm-trees in damp situations. A large number may be found together. Both males and females share in the incubation." They were not breeding in February and March, when I found them frequenting the thick forests around Abrobonko near Cape Coast, and at Abouri in the Aguapim district. Ussher considered





them to be very common in Fantee, generally frequenting the bamboo and cane-brakes, where hundreds of their pendent nests were to be seen. He also procured specimens at the Volta River. In Togoland Mr. Baumann found it known to the natives at Logba as the "Karue," and in Dahome, according to Mr. Francis Newton, it was known at Passé as the "Cangole." In the Niger district specimens have been collected at Onitscha (Forbes), Axim (Hartert), and Lower Niger (Ansorge). From further south it is known to me only from Gaboon (Aubrey Lecomte) and Landana (Lucan and Petit).

Cinnamopteryx tricolor. (Pl. 38.)

Hyphantornis tricolor, Hartl. J. f. O., 1854, p. 110 Sierra Leone.

Cinnamopteryx tricolor, Sharpe, Cat. B. M. xiii. p. 471 (1890); Shelley, B. Afr. I. No. 567 (1896).

Hyphantornis fuscocastanea, Bocage, Jorn. Lisb. 1880, p. 58 Loema R. Ploceus fuscocastaneus, Reichen. Vög. Afr. iii. p. 53 (1904). Ploceus rufoniger, Reichen. Orn. Mouatsb. 1893, p. 29 Kinjawanga.

Adult. Upper parts jet black, with a large patch of canary yellow extending over the hinder half of the neck and the upper back; portion of the inner margins of the quills brownish white; upper and middle throat black like the entire head; remainder of the neck and the breast uniform chestnut; thighs and under tail-coverts black. Iris and feet brown; bill black. Total length 5.6 inches, culmen 0.75, wing 3.5, tail 2.0, tarsus 0.85. 24. 2. 72, Abouri (T. E. Buckley).

Immature. Differs in having the head, neck and front of back chestnut, slightly mottled with yellow near the base of the hind neck; front of neck and breast dusky brown mottled with pale chestnut; thighs and under tailcoverts blackish. Total length 6.0, culmen 0.8, wing 3.35, tail 2.0, tarsus 0.85. 24. 2. 72, Abouri (T. E. Buckley).

In the type of *H. fuscoeastanea* the under parts are entirely chestnut; wing 3.35.

The Yellow-mantled Cinnamon-Weaver ranges from Sierra Leone to Loango and eastward to 29° 30' E. long.

The species is abundant at Sierra Leone, where the late Capt. Sabine discovered the type, a fine specimen, which is now in the British Museum. Mr. Robin Kemp informs me that "In the Mission-ground at Bo there stands a large tree, which is made use of jointly, as a breeding resort, for both this species and *Melanopteryx albinucha*. A large colony lives in the above-mentioned tree, which is adorned with a great number of pendent nests, from which I procured all the immature specimens, but did not obtain any eggs. From April to the beginning of October, while I was there, I noticed no signs of change in the colouring of the adults, all of which were alike in plumage. This tree during the day appeared as a rule tenantless, but towards sundown presented a scene of great activity." In Liberia Dr. Büttikofer obtained a full plumaged male at Bavia, and a female in exactly the same plumage, in the bush near Schieffelinsville.

In the Aguapim Mountains of the Gold Coast Riis procured a specimen, and while I was there in February, 1872, Buckley shot two adults in company with a full grown bird in immature plumage, which closely resembles in colouring the type of Huphantornis fuscocastanea, Bocage, which I have figured as the young of the present species. I shot a specimen at Abokobi on our way back to Accra, and the species has been procured by Mr. Boyd Alexander at Prahsu, Fumsu and Kwisse, who came to the same conclusion as we did, that these Weavers are not uncommon in the forests of the Gold Coast. In Togoland Mr. Baumann sexed a male and female which were identical in colouring, and in full plumage in July and October, and a specimen procured in Camaroons in November is also in full plumage. Dr. Ausorge has procured a series from the Lower Niger. The occurrence of the species further south and east of Camaroons is known to me only by the types of Hyphantornis fuscocastanea, Bocage, and Ploceus rutioniquer, Reichen. The former was procured by Lucan and Petit at the Loema River in Loango, and the

latter, which Dr. Reichenow informs us is an immature bird of the present species, came from Kingawanga (Stuhlmann), some fifty miles north of the Albert Edward Nyanza, in about 0° 30' N. lat. by 29° 30' E. long.

It is evident that in this species the sexes are similar in plumage, and it is almost as certain that the adults are not subject to any marked seasonal change of plumage, which is also the case with *Hyphantornis cucultatus*, for I have known of two male cage-birds of that species which have retained the bright coloured plumage during at least eight years, and one of them I have still alive.

Cinnamopteryx interscapularis.

Ploceus interscapularis, Reichen. Orn. Monatsb. 1893, p. 29 Bundeko ; id. Vög. Afr. iii. p. 53 (1904).

Malimbus interscapularis, Shelley, B. Afr. I. No. 490 (1896).

Type. "Black, with the interscapular region yellow. Bill black; feet horny brown; iris pale rufous. Total length 5.6 inches, culmen 0.76, wing 3.24, tail 2.0, tarsus 0.76" (Reichenow).

The Yellow-mantled Black-Weaver inhabits Central Africa.

The type was discovered at Bundeko in about 1° N. lat. 29° 50′ E. long.

This species is, I believe, known only by the type specimen, and it appears to me possible that it may be a black-breasted variety of *C. tricolor*, for the same collection contained an immature specimen of the latter species (the type of *Ploceus rufoniger*) obtained at Kingawana, about half-way between Bundeko and the Albert Edward Nyanza.

Genus XIII. MELANOPTERYX,

Similar to *Malimbus* in structure, but is characterised by being black with no bright colours. The plumage of the sexes is alke excepting in the type species, in which the female is pale olive.

MELANOPTERYX NIGERRIMA

Type.

Melanopteryx, Reichen. Zool. Jahrb. 1886, p. 125, . . M. nigerrima. The genus is confined to West Africa and Equatorial Central Africa and comprises three species.

KEY TO THE SPECIES.

ı.	No white bases to any of the feathers.	
	a^1 . Larger, wing 3.3; tarsi and feet pale brown	nigerrima.
	a ² . General plumage black	3.
	b^2 . Plumage olive, browner above, yellower beneath	Ŷ.
	b^1 . Smaller, wing 2.9; tarsi and feet dark brown	maxwelli.
b.	With pure white bases to many of the feathers, showing	
	mostly on the hind neck; wing 3.1	albinucha.

Melanopteryx nigerrima.

Ploceus nigerrimus, Vieill. N. Dict. xxxiv. p. 130 (1819) Congo; Reichen. Vög. Afr. iii. p. 50 (1904 pt.).

Melanopteryx nigerrima, Sharpe, Cat. B. M. xiii. p. 476 (1890); Shelley, B. Afr. I. No. 491 (1896).

Ploceus niger, Swains. An. in Menag. p. 306 (1838).

Adult male. Jet black, with the wings slightly browner; under wingcoverts and inner edges of the quills a little lighter; base of the feathers of the hind neck grey. "Iris yellow; bill black; tarsi and feet brownish flesh-colour" (Reichenow). Total length 7 inches, culmen 0.8, wing 3.3, tail 2.1, tarsus 0.85. 3, 2. 10, 93, Yambuya (Jameson).

Adult female. Upper parts brownish olive, with blackish centres to the feathers of the hinder crown, neck and mantle, much broader on the latter; lower back and upper tail-coverts more uniform brownish olive, with a few narrow blackish terminal edges to the feathers; tail sepia brown, with a mere trace of olive edges to the feathers; wing sepia brown, with the edges of the inner secondaries, greater and median coverts brownish buff, and inclining to olive on the lesser coverts; under surface of wing, with the inner edges of the quills ashy white, and the coverts buff, with pale brown centres to many of the feathers; sides of head and entire under parts yellow, shaded with brownish olive on the ear-coverts, sides of throat and the flanks. "Iris pale brown; bill greyish brown; tarsi and feet dirty flesh-colour" (Reichenow). Total length 6.2 inches, wing 3.3. \Im , Gaboon (Du Chaillu).

Vieillot's Black Weaver ranges over West Africa from Camaroons into Angola and eastward to Kavirondo.

According to Dr. Reichenow the species is abundant in Camaroons up to 3,000 feet. They breed in colonies, suspending their nests from the ends of leaves of the cocoanut palms and banana trees, often selecting those which grow in the native market-places, at other times they will hang them over water. The nest is rounded with an entrance passage hanging down, and is constructed of fresh grass interwoven with the flowers of the maize, and although usually suspended separately, sometimes as many as three will be built one on top of the other, when the colony is a large one, and space limited. The eggs, two or three in number, are bluish green, and measure on an average 1.0×0.65 . Mr. Bates has obtained the species at the Ja River, and it is apparently equally abundant in Gaboon and Loango. In Angola the type was discovered by Perrein, and Major v. Mechow has obtained the species on the Kuango, a tributary of the Congo, along the course of which river it has been met with by Bohndorff at Leopoldsville and by Jameson at Yambuya.

It ranges over Equatorial Africa to as far east as Kavirondo, where Mr. Jackson, Dr. Ansorge and Mr. Neumann have procured specimens, and is apparently not uncommon in Central Africa, having been obtained on Sesse Island, Bukoba, in Uganda and Unyoro, and in the Mombuttu district at Tomaja and Kudurma.

Melanopteryx maxwelli.

Melanopteryx maxwelli, Alexander, Bull. B. O. C. xiii. p. 54 (1903); id. Ibis, 1903, p. 355 Fernando Po.

Ploceus maxwelli, Reichen. Vög. Afr. iii. p. 52 (1904).

Melanopteryx nigerrima (non Vieill.), Bocage, Jorn. Lisb. 1895, p. 10 Salvad. Acc. R. Sc. Torino, 1903, p. 114 Fernando Po.

Ploceus nigerrimus, Reichen. Vög. Afr. iii. p. 50 (1904 pt.) Fernando Po.

Adult male. Jet black, with the base of all the feathers of the neck grey; under surface of wings dusky, with the inner edges of the quills whitish ash.

"Iris pale yellow; bill black; tarsi and feet dark brown." Total length 5:3 inches, culmen 0.75, wing 2.9, tail 1.8, tarsus 0.7. 3, 31. 11. 02, Ribola (Alexander).

"The sexes are alike in plumage and measurements.

"Immature male. General colour above sooty brown, with traces of yellowish olive edges to the feathers of the hind neck and crown, the latter mottled with black; sides of head and under parts pale yellowish olive, inclining to whitish on the under tail-coverts; thighs light brown; bill hornbrown; legs and feet dark brown.

"Immature female. Similar to immature male, but with no yellowish edges to the feathers of the hind neck and crown; sides of neck and under parts ashy white, inclining to pale tawny on the abdomen and under tailcoverts; outer edge of quills ashy white; iris pale green, legs and feet light brown.

"This species is a good intermediate form between *M. nigerrima* and *M. albinucha*. It differs from the former in being smaller, in the jet black of the upper parts, throat and breast, and in the brownish black legs and feet" (Alexander).

Maxwell's Black Weaver is confined to the island of Fernando Po.

This is a well-marked local species, most nearly allied to *M. albinucha*, but intermediate between that form and *M. nigerrima*. It closely resembles the former in size, but may be readily distinguished from it by the entire absence of white bases to the feathers, and from the latter by its smaller size, the jet-black of the upper parts, throat and breast, and in the brownish black tarsi and feet.

Mr. Boyd Alexander, who discovered the species, writes: "We found this Weaver-bird on the lowlands frequenting the woods, where it nests in colonies, the tops of thick-leaved forest-trees being chosen as nesting sites. The note is a running chatter."

Melanopteryx albinucha.

Sycobius albinucha, Bocage, Jorn. Lisb. 1876, p. 247 W. Afr.

Melanopteryx albinucha, Sharpe, Cat. B. M. xiii. p. 477 (1890); Shelley, B. Afr. I. No. 492 (1896).

Ploceus albinucha, Reichen. Vög. Afr. iii. p. 52 (1904).

Adult male. Jet black, with the base of all the feathers of the back of the neck pure white, which shows through and forms a somewhat defined white collar; wings with the under surface paler and more dusky, inner edges of the quills brownish ash and the coverts ashy black. "Iris pearlwhite, bill black, tarsi and feet brown" (Kemp). Total length 5.7 inches, culmen 0.75, wing 3.1, tail 2.0, tarsus 0.75. Denkera (Ussher).

The White-naped Black Weaver inhabits West Africa, where it ranges from Sierra Leone to the Niger.

Mr. Robin Kemp, while at Sierra Leone, "found these birds breeding in close company with a colony of *Cinnamopteryx tricolor*, on a high tree in the Mission-ground at Bo. They sit about in crowds together, and often huddle up in line. A man I knew shot thirteen of them with one cartridge."

Dr. Büttikofer gives an interesting account of the breeding of these birds in Liberia. During his stay at Schieffelinsville he found a colony of about twenty nests, all hung closely together from the lowest branch of a huge cotton-tree, near his station, while the crown was occupied by a large colony of Hyphantornis cucultatus, the members of which constantly attacked the nests of the former, and robbed the materials for the construction or reparation of their own nests. On visiting the place a few weeks later, the whole colony of M. albinucha had left, evidently driven away by their intolerant congeners.

In the British Museum there are five full plumaged birds and one young one, collected by Ussher, probably from Denkera, as he considered it to be decidedly scarce in Fantee. Mr. Boyd Alexander, who obtained it at Prahsu and Fumsu, writes: "Locally distributed, and found in small parties at the tops of the highest forest trees. During the day, and especially towards evening, the birds may be observed flying from their high points of vantage after insects, and then returning to their perches in the manner of Flycatchers."

From further along the coast it is known to me only by two specimens from the Niger, both in the British Museum.

SYCOBROTUS

Genus XIV. SYCOBROTUS.

Bill greyish horn-colour, rather long, as broad as deep at the nostrils, culmen rounded and slightly curved, sides straight from the gape to the tip; nasal-orifice well exposed and of a horizontal oval form, with a slight overhanging membrane. Wing rounded; primaries 1 half the length of 2; 2 shorter than 6; 3, 4 and 5 longest and about equal. Tarsi and feet fairly strong.

Plumage of sexes very similar and shows no seasonal variation; upper parts nearly uniform black, brown or dark grey; breast and under tailcoverts bright yellow.

Type.

Eupodes (non Koch, 1835, Arachn.), Jard. and Selby, Ill.

Orn. n. s. pl. 10 (1836) S. gregalis. Symplectes (nec Symplecta, Meig. 1830, Dipt.), Swains.

KEY TO THE SPECIES.

		own brown.													
a ¹ . Entire upper parts and sides of head uniform sepia															
		brown													gregalis. 6
	b^1 .	Forehead and	cheel	ks	W	ith	11	hit	е	tip	s	to	th	е	
		feathers				•									stictifrons. 369
Ь.	Cro	own black.													
	c1.	Back brown or g	rey.												
	a	² . Chin and thro	at mo	re	asł	ıy.									
		a ³ . Back brown	ner												amaurocephalus. 3 + 0
															tephronotus. 3'+1
	b	² . Chin jet black													
		c^3 . Throat yello d^3 . Upper throat	w.												mentalis. 3'i
		d ³ . Upper throa	at bla	ck											nandensis.
	171.	Back jet black													

Sycobrotus gregalis.

Fringilla gregalis, Licht. Verz. Doubl. p. 23 (1823) Kaffraria.
Ploceus gregalis, Reichen. Vög. Afr. iii. p. 32 (1904).
Ploceus chrysogaster, Vigors, P. Z. S. 1831, p. 92 Algoa Bay.
Symplectes chrysomus, Swains. B. W. Afr. i. p. 170 (1837) S. Afr., Senegal.

- Eupodes xanthosomus, Jard. and Selby, Ill. Orn. n. s. pl. 10 (1837) S. Afr., Sierra Leone.
- Sycobrotus "bicolor, Vieill." Sharpe, Cat. B. M. xiii. p. 422 (1890); Shelley, B. Afr. I. No. 503 (1896); Shortridge, Ibis, 1904, p. 176 Pondoland.

Adults. Upper parts and entire sides of the head glossy sepia brown; an ill-defined yellow band across the rump and a wash of olive on the upper tail-coverts; wings and tail of a more silky and less velvety appearance; primaries with narrow whitish edges; under surface of wing, with the inner edges of the quills and the coverts white, the latter with a broadish band of sepia brown at the bend of the wing; chin and upper throat white, shading into bright golden yellow on the remainder of the under parts; chin and upper throat generally somewhat barred with the black bases of the feathers, this character is usually but not always most strongly marked in the male; in the middle of the fore chest there are a few partly hidden black feathers. "Iris dark brown; bill pale horny grey, shaded with black on the culmen towards the tip; legs lilac pink." Total length 5-8 and 6-0 inches, culmen 0-75, wing 3-5 and 3-35, tail 2-3, tarsus 0-9. 3, 9, 6. 75, Pinetown (T. L. Ayres).

The Natal Dark-backed Weaver inhabits Eastern Cape Colony, Natal and Zululand.

It is represented in the British Museum by specimens from Grahamstown, Eland's Post, Kingwilliamstown, East London, and a fine series from Durban and Pinetown. The type of *Ploceus chrysogaster* was procured by Mr. Henry Ellis near Algoa Bay, which is the most western range I can find for the species, and it is apparently not uncommon there. Layard writes: "The most western point reached by it being Van Stadden's River, near Port Elizabeth, where we obtained it in March, 1870, in the wooded kloofs through which that river flows. Mr. Rickard tells us that he received several specimens from Kraggakamma, near Port Elizabeth. Proceeding eastward, we saw it sparingly near Grahamstown, the Kowie, Kat Berg, and Keish Kamma, and Dr. Atherston tells us that it is found all along the east coast."

In Natal I found it inhabiting the thickest parts of the bush, and being of an enquiring mind, it frequently approaches an intruder within a few yards, still keeping concealed amongst the thick foliage, though its jarring note is often heard as it creeps through the network of boughs. As I sat with my gun beside me, skinning my last trophy, I occasionally saw this bird or another bush frequenter peeping at me through the boughs, and the instant they caught my eye they disappeared, but a snap-shot in their direction was often effective.

According to Stark, "This species differs considerably in its habits from the majority of the Ploceinæ. It is never met with in flocks, but almost invariably in single pairs, generally in thick forest or bush, where the growth is both high and dense. These Weavers attract attention by their loud and frequently repeated harsh creaking notes, which have been not inaptly compared to the jarring of a rusty hinge.

"In addition to insects, which constitute their ordinary food, these Weaver-birds occasionally feed on seeds, berries and small forest fruit. Their nests, shaped like long-necked retorts, are suspended from the extremities of branches, frequently at a considerable height and often overhanging a stream or open space in the bush. They are rather large and are coarsely woven from the tendrils of vines without any soft lining. A pair of birds will frequently work for three months on the structure of their nest. They invariably build alone, never in colonies. During the month of September or early in October they lay two, or occasionally three, eggs of a whitish ground colonr, rather thickly spotted with pale red. They measure about 0.75×0.60 ."

That the type of *Pyranga icteromelas*, Vieill., was a native of America, I look upon as impossible; that it and the type of *Ploceus bicolor*, Vieill., belong to one species, as Pucheran remarks, is improbable, and that the latter refers to a West African species is possible. This leaves *Fringilla gregalis*,





1 Sycobrotus stictifrons 2 Sitagra aliena. Licht., as the oldest name we can be certain of, for the South African bird. Vieillot's description of his *Pyranga icteromelas* agrees perhaps best with the immature plumage of *S. kersteni*.

Sycobrotus stictifrons. (Pl. 39, fig. 1.)

Symplectes stictifrons, Fisch. and Reichen. J. f. O. 1885, p. 373 Lindi.

Sycobrotus stictifrons, Sharpe, Cat. B. M. xiii. p. 424 (1890); Shelley B. Afr. I. No. 504 (1896).

Ploceus stictifrons, Reichen. Vög. Afr. iii. p. 33 (1904).

Adults. Similar to S. gregalis, from which they differ in the upper parts being slightly paler and more ashy, especially towards the lower back and upper tail-coverts, which are entirely ashy brown; feathers of forehead, front of crown and checks with white tips, giving to these parts a speckled appearance; chin and upper throat dark brown, with whitish angular shaft-stripes; centre of fore chest with a little black, generally hidden by the yellow portion of the feathers. "Iris reddish brown; bill grey; feet yellowish flesh-colour" (Stuhlmann). Total length 6.3 inches, culmen 0.75, wing 3.4, tail 2.4, tarsus 0.9.

Immature. Differs in the pale spots on the head being much less sharply defined; chin and upper half of throat yellowish buff. Ntondwe, June (A. Sharpe).

Fischer's Dark-backed Weaver inhabits Eastern Africa between 10° and 24° S. lat.

The most southern range known for the species is Inhambane in Portuguese East Africa. Here, according to Mr. Francis: "This Weaver-bird is found all over the district, wherever there is thick bush." I do not otherwise find it recorded from south of the Zambesi. M. E. Foa met with it up the Zambesi, where he found it known to the natives as the "Goti." To the north of that river Sir John Kirk procured, during the Livingstone Expedition, three specimens at the Shiré Cataract, and from the number of specimens collected by Mr. Alexander Whyte and Sir Alfred Sharpe it must be a common bird throughout Nyasaland. Dr. Stuhlmann obtained a specimen at Quilemaine; the late Joseph

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Thomson one at the Rovuma River, and Fischer discovered the type at Lindi, which is the most northern range known to me for the species. No doubt, as Stark has remarked, its habits are similar to that of the better known South African species, S. gregalis.

Sycobrotus amaurocephalus.

Sycobrotus amaurocephalus, Cab. J. f. O. 1880, p. 349, pl. 3, fig. 1 Angola; Sharpe, Cat. B. M. xiii, p. 423 (1890); Shelley, B. Afr. I. No. 505 (1896).

? Ploceus bicolor, Vieill. N. Dict. xxxiv. p. 127 (1819) Senegal.

"Ploceus bicolor, Vieill." Reichen. Vög. Afr. iii. p. 34 (1904).

Adults. Similar to those of S. gregalis, from which it differs in the paler brown colouring of the back of the neck, back, wings and tail, and from S. stictifrons in the uniform brownish black colouring of the top and sides of the bead, which dark parts are browner and contrast less sharply with the back of the neck than in S. tephronotus. Total length 5.7 inches, culmen 0.7, wing 3.25, tail 2.3, tarsus 0.8. \mathfrak{P} , Tanganyika Plateau (Manning).

Type of Ploceus bicolor, Vieill. "Head and nape blackish; back of neck, back, wing-coverts and edges of quills brownish olive; rump and remainder of wings and tail brown; feathers of throat brown with yellow ends; under parts yellow; bill grey" (Vieillot).

The Angola Dark-backed Weaver ranges over Angola, Benguela and the Tanganyika district.

The type was discovered in Angola at Malandge, by Mr. Otto Schütt. There is a specimen in the Tring Museum, obtained by Mr. C. H. Pemberton at Dondo on the Quanza River, on the label of which is written: " \mathcal{J} , 30. 6. 01; iris red brown; feet wainscot brown; bill ditto, with the upper mandible darker." This specimen agrees perfectly with the specimen in the British Museum from the Tanganyika plateau. The species has also been recorded from Quissange and Quibulla in Benguela (Anchieta), Kibondo (Bohndorff), Lukumbi and Lualaba (Böhm).

The present species is very similar to S. tephronotus, which

is at present known only from Camaroons and Fernando Po, so we should not be justified in using the name *Ploceus bicolor*, Vieill., for either of them without comparing the type, which I believe has been lost.

Sycobrotus tephronotus.

Symplectes tephronotus, Reichen, J. f. O. 1892, pp. 184, 219 Buea.
Sycobrotus tephronotus, Shelley, B. Afr. I. No. 506 (1896).
Ploceus tephronotus, Reichen. Vög. Afr. iii. p. 34, pl. , fig. 3 (1904).
Sycobrotus poensis, Alexander, Bull. B. O. C. xiii. p. 38 (1903) Fernando Po.

Adults. Very similar to S. amaurocephalus, from which they differ in the top and sides of the head being deeper black and contrasting more sharply with the back of the neck, which is of a grey shade like the remainder of the upper parts. Total length about 5.7 inches, culmen 0.7 to 0.75, wing 3.3, tail 2.3, tarsus 0.9. σ , 15. 11. 02, Fernando Po (Alexander), and 21. 9. 91, Buea (Preuss).

The Camaroons Dark-backed Weaver inhabits Camaroons and Fernando Po.

The type was discovered by Dr. Preuss at Buea in the highlands of Camaroons and the species has also been recorded from Jaunde (Zenker).

From Fernando Po Mr. Boyd Alexander writes: "We found this species frequenting the thick forest-trees. It appeared to be very local and was generally observed in small parties. The note may be described as a running voluble 'tizz.'"

Sycobrotus mentalis.

Symplectes mentalis, Hartl. J. f. O. 1891, p. 314 Buguera, Ploceus mentalis, Reichen, Vög. Afr. iii. p. 35 (1904).

Subspecies a.

Sycobrotus nandensis, Jackson, Ibis, 1899, p. 615 Nandi. Ploceus nandensis, Reichen, Vög. Afr. iii, p. 35 (1904). Type. Top and sides of head deep black; back grey; wings and tail brownish black; under parts yellow, paler on the throat and under tailcoverts; chin black. "Iris red; bill bluish grey; feet reddish flesh-colour." Total length 7:48 inches, culmen 0.72, wing 3:48, tail 2:0, tarsus 0:72. 3, ad." (Hartlaub). Buguera (Emin).

Type of S. nandensis. Differs from the above only in having the upper half of the throat jet black, with the pale edges to the feathers confined to the middle throat and inclining there to bright yellow spots. "Iris dull crimson; bill horn-blue, with the tip black; feet flesh-colour." Total length 5-5 inches, culmen 0.7, wing 3-15, tail 2-1, tarsus 0.95. 2, 10. 4, 96, Nandi (Jackson).

The Black-chinned Grey-backed Weaver inhabits Central Equatorial Africa.

The species is only known by the type discovered by Emin at Buguera, close to Wadelai, an adult male, and by the type of *S. nandensis*, a female bird from Nandi, so it is highly probable that they represent the two sexes of one species, as Dr. Reichenow has suggested (Vög. Afr. iii. p. 35); but as this has yet to be proved I have treated them as subspecies.

The measurement of the wing, in the type of *S. mentalis*, as given by Hartlaub, appears to me to be an error, for I think it should be the same as in *S. tephronotus* and *S. nandensis*.

Sycobrotus kersteni.

Sycobrotus kersteni, Finsch and Hartl. Vög. O. Afr. p. 404, pl. 6 (1870) Zanzibar; Sharpe, Cat. B. M. xiii. p. 423 (1890); Shelley, B. Afr. I. No. 507 (1896).

Ploceus kersteni, Reichen. Vög. Afr. iii. p. 31 (1904).

? Pyranga icteromelas, Vieill. N. Dict. xxviii. p. 291 (1818) America.

Adults. Head, neck down to the middle throat and the entire upper parts glossy jet black; under surface of the wing, with the inner edges of the quills and the coverts white, the latter with a broadish black band next to the bend of the wing; lower half of throat, breast and under tail-coverts golden yellow, with an orange shade towards the crop; centre of the forechest with a little black generally hidden by the yellow portion of the feathers. "Iris deep red brown; bill bluish, feet pale flesh-colour" (Fischer). Total length 6.1 inches, culmen 0.8, wing 3.7, tail 2.4, tarsus 0.9. Lamu (Kirk).

Immature. Differs in the chin and upper throat being buff, shaded with yellow. Lamu (Kirk).

The type of *Pyranga icteromelas*, Vieill., is described as having the head, hind neck, and upper parts deep black, and the remainder of the plumage like that of the immature bird above described.

Kersten's Dark-backed Weaver ranges over East Africa from Zanzibar and Ugogo to the Equator.

The type was discovered during Baron v. d. Decken's expedition to the Zanzibar Coast and was named after Dr. Kersten. All the information I find regarding the habits of this species is given by Fischer, who records it as abundant in wooded localities, from Zanzibar Island, and Nguru on the border of Ugogo, to Wapokomoland on the Tana River. He found them in small parties of six to ten, rarely more, busy during the mornings in searching among the leaves and twigs for their insect food, the males at intervals making the woods ring with their loud shrill notes, which may be imitated on a piano by the notes C, E, G, C. The first C played strongly and the last C dwelt upon, which is often followed after a short pause by a G.

When the breeding time approaches the flocks break up into pairs, each of which select their own breeding place. The nest, like those of its congeners, is suspended from a pliant twig. One of these he procured on Zanzibar Island, August 4, is described as retort-shaped, with the entrance passage 6 inches long, and the body of the nest was 5.2 inches wide by 8 deep.

The species has been met with as far west as Lake Tanganyika, in the Kawende country, by Böhm, and as far north as the Lower Juba River, close to the Equator, by Erlanger.

HETERHYPHANTES (

Genus XV. HETERHYPHANTES.

Similar to Sycobrotus in most of its structure; but the bill, which is black in adults, is generally slightly smaller and shorter; the nostrils have less or no overhanging membrane. Sexes never alike in plumage, which has always some yellow on the upper parts, including the eyebrows; but the upper surface of the wings and tail are entirely black, a character by which the members of this and the last four genera may be readily distinguished from all the Weavers which I include after this genus.

Heterhyphantes, Sharpe, Cat. B. M. xiii. p. 414 (1890).	H. melanogaster.
Melanhyphantes, Sharpe, Jameson's Story, Rear	
Column, p. 404 (1890).	H. nigricollis.
Phormoplectes, Reichen. J. f. O. 1903, p. 149	H. insignis.

The genus is confined to West and Central Africa and comprises eight species. It forms a good connecting link between Sycobrotus and Hyphanturgus, resembling the former in the uniform black of the wings and tail, and Hyphanturgus in the colouring of the sides of the head and the threat, in both sexes of Heterhyphantes nigricollis and Hyphanturgus ocularius.

Three out of the eight species I recognise are somewhat doubtful form, for H. dorsomaculatus may prove not to be distinct from H. insignis and H. auricomus, an immature example of one of the two. H. malensis is, perhaps, probably not distinct from H. mclanoxanthus.

KEY TO THE SPECIES.

a. Back yellow or partly so; wings and tail black;	
breast yellow.	
a ¹ . Some black on head; crown chestnut in males,	
black in female.	
a ² . Back entirely yellow	insignis. 375
b^2 . Yellow of back confined to a central band	dorsomaculatus. 374
b^{1} . Entire head and neck yellow	auricomus. 348
b. Back entirely black or brown.	
c^1 . Breast black, portion of head yellow; chiu and	
throat yellow in females.	
c ² . With a yellow crop-band	melanogaster, 3.
d^2 . Crop black like the throat and breast	stephanophorus, 3 . 3
d^{1} . Breast yellow; males with the crown yellow and	
throat black; females with the crown black and	
the throat yellow.	
e ² . Back, wings and tail sepia brown	nigricollis.

 f^2 . Back, wings and tail black

a³. Black eye-stripe extending forward to the bill . melanoxanthus.

 b^{s} . Black eye-stripe confined to head behind the

eye. malensis.

Heterhyphantes insignis.

Sycobrotus insiguis, Sharpe, Ibis, 1891, pp. 117, 253, pl. 6, fig. 1, 9 Mt. Elgon.

Heterhyphantes insignis, Shelley, B. Afr. I. No. 516 (1896).

Ploceus insignis, Reichen. Vög. Afr. iii. p. 36 (1904).

Symplectes croconotus, Reichen. J. f. Ö. 1892, pp. 185, 219 Buea ; Sjöst. Sv. Ak. Handl. Stockh. 1895, p. 88, pl. 9, 3.

Heterhyphantes croconotus, Shelley, B. Afr. I. No. 517 (1896).

Symplectes preussi, Reichen. J. f. O. 1892, p. 442, 3 Victoria.

Heterhyphantes preussi, Shelley, B. Afr. I. No. 518 (1896).

Symplectes castanicapillus, Sjöst. Orn. Monatsb. 1893, p. 43 Camaroons.

Heterhyphantes stephanophorus, *laps. cal. pro. H. insignis*, Sharpe, Bull. B. O. C. v. p. 43 (1897).

Adult male. Forehead and crown chestnut; neck, back, breast, thighs and under tail-coverts golden yellow, slightly mottled with black on the mantle; sides of head, chin, upper throat, lower half of sides of neck, scapulars, wings and tail glossy black; upper tail-coverts black, mottled with yellow; inner edges of the quills and the under wing-coverts whitish ash, the latter bordered with black at the edge of the wing. "Iris crimson brown; bill black, feet bluish flesh-colour" (Jackson). Total length 5.5 inches, culmen 0.6, wing 3.5, tail 2.1, tarsus 0.85. \mathcal{J} , 2.00, N.E. Kenya (Delamere).

Adult female. Differs in having the entire head, as well as the upper third of the neck, jet black; upper tail-coverts entirely black. 9, 9, 12, 99, Boromo (Delamere). In the type the yellow of the under parts extends up the middle throat and the upper tail-coverts are partly washed with yellow. "Iris, bill and feet as in the male." Wing 3.2. Mt. Elgon (Jackson).

The Yellow-bodied Black-winged Weaver ranges over Equatorial Africa from Camaroons into the highlands of Nandi, Mau and Mount Kenia, 37° 30' E. long.

The type of *Symplectes croconotus* was procured by Mr. Preuss at Buea in the Camaroons highlands. It is a female, in not quite such full plumage as the type of the species discovered

HETERHYPHANTES INSIGNIS

by Mr. Jackson on Mount Elgon and figured, "Ibis," 1891, pl. 6, fig. 1. A little later Mr. Sjöstedt figured the full plumaged male (Sv. Ak. Handl. Stockh. 1895, pl. 9), which differs from the female in having the forehead and crown bright rufous, instead of black like the remainder of the head, and is the Symplectes preussi of Dr. Reichenow.

The species is probably a frequenter of wooded highlands, which may account for its not having been recorded from the country between Camaroons and Mount Elgon, for I am unwilling to look upon the Camaroons S. croconotus as subspecifically distinct from H. insignis.

The most eastern range known to me for the species is Embo, on the north-east side of Mount Kenia, where a specimen has been procured by Lord Delamere, February, 1900, and there is another of his in the British Museum from Boromo on the Kikuyu escarpment, December 9, 1899. Mr. Neumann obtained a male on the Mau highland, and Mr. Jackson has met with it there, at Nandi and Mount Elgon, and writes: " \mathcal{J} and \mathcal{P} , Ravine, June 24, 1896. Iris crimson brown; bill black; feet bluish flesh-colour." \mathcal{J} , Ravine, March 20, 1897. "Feet brown. Found nearly always in pairs. In habits these Weaver-birds much resemble our Goldfinch, being found in high trees, and twisting and turning into all sorts of positions in search of their insect food. The stomach contained beetles, insects, &c., but no grain or seed."

Nandi, 6,500 feet, \mathfrak{s} , June 13, 1896. "Feet pale brown. Always in pairs. Climbs about big stems and branches like a Tit." Nandi, \mathfrak{s} , May 26, 1898. "Breeding, nest made of corkscrew-like tendrils of convolvuli, with long retort-shaped spout, woven on to the under side of a branch of a thorntree, but not suspended from the end of a branch. Eggs two, pale blue." \mathfrak{s} , juv., Nandi, July 7, 1898. "Iris brown ; bill dusky horn-colour, the lower mandible whitish horn ; feet pale slaty brown."

Dr. Sharpe adds: "One of the most interesting of Mr. Jackson's discoveries in the field has been that this Black-andvellow Weaver has a chestnut-headed male, which appears to me to be Symplectes croconatus of Sjöstedt, hitherto known only from the Camaroons. In mentioning this fact in 1897, I accidentally referred to the species as Heterhyphantes stephanophorus, from a too hasty examination of the numbers on the plate in the 'Ibis' for 1891. The young male procured on July 7 resembles the adult female, but has the black wing-coverts edged with yellow and the yellow of the back is paler, the entire under surface of the body being pale lemon yellow. The crown and sides of the head are olive green with black feathers intermingled, showing that in its first full plumage the head is black, like that of the old female. Even in adult males the amount of black on the throat varies, and in one of them the throat is entirely vellow."

Heterhyphantes dorsomaculatus.

Symplectes dorsomaculatus, Reichen. Orn. Monatsb. 1893, p. 177 Jaunde; id. J. f. O. 1894, p. 38; 1896, p. 31, pl. 4, upper fig.

Heterhyphantes dorsomaculatus, Shelley, B. Afr. I. No. 519 (1896).

Ploceus dorsomaculatus, Reichen. Vög. Afr. iii. p. 37 (1904).

"*Type.* Upper parts black, with the wings, tail and upper tail-coverts more dusky; feathers of the nape and down the middle of the back with the outer side or tip yellow; sides of head and ueck and the chin black; under parts pale yellow. Bill lead grey; tarsi and feet pale brown. Total length 5.6 inches, culmen 0.65, wing 3.0, tail 2.0, tarsus 7.6." (Reichenow).

The Mottle - backed Black - winged Weaver inhabits Camaroons.

The species was discovered by Mr. Zenker at Jaunde and is known, I believe, by the type only. On comparing the figure of this specimen with that of the type of *II. insignis* (Ibis, 1891, pl. 6, fig. 1), it appears possible that this bird may be in one of the plumages of the latter; but there is no evidence to support that theory, beyond their both inhabiting Camaroons.

Heterhyphantes auricomus.

Symplectes auricomus, Sjöstedt, Vet. Ak. Haudl. Stockh. 1895, p. 86, pl. 8 Bonge.

Ploceus auricomus, Reichen. Vög. Afr. iii. p. 37 (1904).

"Type. Similar to H. insignis, but differing in the entire head and neck being yellow. General plumage pale yellow, the crown and nape washed with chestnut; wings, scapulars, sides of mantle and the tail black; inner tail-feathers and greater wing-coverts margined with yellow; scapulars and lesser wing-coverts edged with yellow; under wing-coverts pale brown; axillaries washed with yellow; upper tail-coverts with terminal yellow margins. Bill pale; iris brown. Total length 5-6 inches, culture 0-6, wing 3-25, tail 1-75, tarsus 0-7." Q, 11. 91, Bonge (Sjöstedt).

The Golden Black-winged Weaver inhabits Camaroons.

The type was discovered by Mr. Sjöstedt, November, 1891, at Bonge. It is a female, and Mr. Sjöstedt has suggested the possibility of its being only an immature specimen of *H. insignis*.

From the pale coloured bill I have little doubt that Mr. Sjöstedt's bird is quite young, and Mr. Zenker, having met with a second specimen, as well as the type of Symplectes dorsomaculatus, Reichenow, at Jaunde, is strongly in favour of these two forms belonging to one species. I should, however, hesitate to refer S. dorsomaculatus to H. insignis, Sharpe, although the latter form is apparently the most abundant in Camaroons, having been obtained at three different places in the highlands of that colony. With our present knowledge of the subject I cannot do otherwise than treat these three forms as distinct species.

Heterhyphantes melanogaster.

Ploceus melanogaster, Shelley, P. Z. S. 1887, p. 126, pl. 14, fig. 2, *Camaroons*; Reichen. Vög. Afr. iii. p. 43 (1904).

Heterhyphantes malanogaster, Sharpe, Cat. B. M. xiii. p. 417 (1890); Shelley, B. Afr. I. No. 512 (1896).

Adult male. Forehead, crown, sides of upper neck and a fairly broad band round the lower throat bright yellow, with a black spot on the nape; sides of head more chestaut-shaded yellow, with a broad black stripe through the eye; cheeks in front and below black like the chin, throat and remainder of the plunage; under wing-coverts jet black; under surface of quills slightly browner, especially along their inner webs. "Iris crimson; bill and legs black" (Alexander). Total length 5-5 inches, culmen 0.8, wing 2.8, tail 2.9, tarsus 0.85. \triangleleft , 15. 5. 91, Buea (Preuss).

Adult female. Differs in having the hinder third of the crown black; remainder of the head, chin and throat yellow, with the lores and a band through the eye black. Wing 2.6. Type, Camaroons (H. H. Johnston).

Johnston's Yellow-headed Black Weaver inhabits Camaroons and Fernando Po.

The species is known to me from Fernando Po by two males and a female procured by Mr. Boyd Alexander at Moka, on the south-eastern side of that island. The type, a female, was discovered by Sir Harry Johnston in the highlands of Camaroons, and the species has been obtained in that country at Buea (Preuss) and Mann's Well (Knutson).

This Weaver has been recorded, by error, from British East Africa, some 1,500 miles further east, owing to Mr. Jackson's female specimens of *H. stephanophorus* having been mistaken for the present species, which they closely resemble, but have a narrower yellow frontal band.

Heterhyphantes stephanophorus.

Heterbyphantes stephanophorus, Sharpe, Ibis, 1891, pp. 117, 253, pl. 6, fig. 2, J Mau; Shelley, B. Afr. I. No. 513 (1896).

Ploceus stephanophorus, Reichen. Vög. Afr. iii. p. 43 (1904).

Heterbyphantes melanogaster (non Shelley), Jackson, Ibis, 1899, p. 612 Ravine, Nandi.

HETERHYPHANTES STEPHANOPHORUS

Type, adult male. Forehead and two-thirds of the crown yellow, which colour extends back as a broad margin to the black eye-stripe and joins the yellow of the ear-coverts, cheeks and sides of the niddle throat; remainder of the plumage jet black, with a slight wash of yellow on the under tail-coverts. "Iris crimson brown; bill black; legs horn blue." Total length 5-8 inches, culmen 0.7, wing 3-0, tail 2-3, tarsus 0-85. \mathcal{J} , 14.9.89, Mau (Jackson).

Female. Similar to the female of H. melanogaster, but with the frontal patch narrower, measuring only 0.5 inch back from the bill. Total length 5.75 inches, culmen 0.65, wing 2.9, tail 2.2, tarsus 0.8. 24. 4. 98, Nandi (Jackson).

Immature. Upper parts dusky black, with some rufous yellow edges to the feathers of the forehead and crown; remainder of head, chin and throat rufous buff, mottled with black on the sides of the head and inclining to dusky black in front of the eye; breast and under tail-coverts pale dusky brown, darker on the flanks and somewhat mottled on the crop, with darker centres to the feathers. Bill brown, much paler below. 9, 10, 4, 98, Nandi (Jackson).

Jackson's Yellow-headed Black Weaver inhabits the Mau and Nandi district of the Equator.

The species is closely allied to *H. melanogaster*, but differs in the full plumaged birds having less yellow on the top of the head, otherwise the females are hard to distinguish, but the male is easily recognised by the absence of any yellow pectoral collar, the entire throat and breast being uniform black. The type, which has been well figured, is an adult male discovered by Mr. Jackson in Mau; at the Eldoma Ravine and Nandi he has obtained young birds in July and adults of both sexes in April, June and July, and there can, I think, be no doubt but the specimens from these localities which have been referred to *H. melanogaster* are females of this species, which at present is known only from a very limited area, and *H. melanogaster* is probably a rather local West African form.

Heterhyphantes nigricollis.

Malimbus nigricollis, Vieill. Ois. Chant. p. 74, pl. 45 (1805), J Congo.

- Heterhyphantes nigricollis, Sharpe, Cat. B. M. xiii. p. 415 (1890); Shelley, B. Afr. I. No. 515 (1896).
- Ploceus nigricollis, Reichen. Vög. Afr. iii. p. 44 (1904).
- Ploceus atricapillus, Vieill. N. Dict. xxxiv. p. 128 (1819), 3 Congo.
- Ploceus jonquilaceus, Vieill. t. c. p. 130, 9.
- Ploceus flavocapillus, Vieill. Enc. Méth. ii. p. 698 (1822).
- Ploceus atrogularis, Voigt. Cuv. Thierr. p. 564 (1831).
- Ploceus tricolor, Hartl. Verz. Hamb. 1850, pp. 28, 46.
- Hyphantornis grayi, J. and E. Verr. Rev. et Mag. Zool. 1851, p. 514.
- Symplectes chrysophrys, J. and E. Verr. Rev. et Mag. Zool. 1855, p. 106 Gaboon.
- Hyphantornis flavigula, Cass. Pr. Philad. Ac. 1859, p. 134.
- Hyphantornis amauronotus, Reichen, J. f. O. 1877, p. 27 Loango.

Adult male. Head, sides of neck and the under parts golden yellow, slightly shaded with chestnut on the head and crop, and with a band through the eye, the chin and centre of the throat jet black; hind neck, mantle and wing-coverts deep sepia brown; quills more dusky brown, faintly edged with olive; lower back and upper tail-coverts dusky brown, washed with olive yellow; tail dark brown, with an olive shade along the edges of the feathers; inner margins of the quills and the under wing-coverts buff, mottled with black and yellow at the edge of the wing; axillaries pale yellow. "Iris straw-colour; bill black; feet dusky red." Total length 6.2 inches, culmen 0.65, wing 2.9, tail 2.1, tarsus 0.75. \mathcal{J} , 23. 6. 83, Bellima (Emin).

Adult female. Differs from the male in the colouring of the head and neck; forehead and crown black; a complete pale yellow eyebrow separated from the yellow ear-coverts and cheeks by a black band; chin and entire throat pale yellow. Wing 2.85. Yambuya (Jameson).

Immature. Similar to the female, from which it differs in the forehead, crown and mantle being somewhat shaded with olive yellow, and the bill pale, inclining to flesh-colour on the lower mandible. Landana (Petit).

Vieillot's Black-and-yellow Weaver ranges from Camaroons into Angola and Kavironda.

In Camaroons Mr. Zenker obtained the species at Jaunde, where he found it known to the natives as the "Insoma." It has also been procured in the mountains by Crossley and in the Efnlen and Ja River districts by Mr. Bates. In Gaboon,

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specimens have been collected at Cape Lopez, Moonda and Ogowé Rivers (Du Chaillu), and the types of *Hyphantornis* grayi, Symplectes chrysophrys and *Hyphantornis flavigula* all came from that country. The type of *Hyphantornis amauro*notus is one of Falkenstein's specimens from Chinchonxo. It has also been recorded from Landana and Condé (Petit).

The species was discovered by Perrein at the Congo, where he procured both sexes, and Vieillot, under the impression that they belonged to different species, named the male *Malimbus nigricollis* and the female *Ploceus atricapillus*, and again described the male under the name of *Ploceus jonquillaceus* from an Angola specimen. In 1850 Hartlaub gave the inappropriate name of *Ploceus tricolor* to a specimen of this species, which has caused Dr. Reichenow to reject the name *Ploceus tricolor*, Hartl., 1854, for my *Cinnamopteryx tricolor*, as he places that species and the present one both in the genus *Ploceus*.

In Angola, according to Verreaux, the species is rare, but it has been obtained as far south as Loando by Toulson. Up the Congo it has been recorded from Yambuya (Jameson), Manyanga and Rivariva (Bohndorff).

Towards the Equator Emin has procured the species at Bellima in the Mombuttu country, at Wadelai on the Upper White Nile and at Bukoba on Victoria Nyanza. From its most eastern known range there is a male obtained by Mr. Jackson at Kakomega in Kavirondo, April, 1898, at an elevation of 5,000 feet.

With regard to the habits of the species; it is apparently not gregarious, but wanders in pairs or family parties through the forest districts. The egg has been described by Mr. Kuschel as greyish green, with small greyish violet and ashy brown spots and freckles inclining to form a zone at the thick end, and measures 0.85×0.6 .

Heterhyphantes melanoxanthus.

- Hyphanturgus melanoxanthus, Cab. J. f. O. 1878, pp. 205, 232 Mombasa.
- Heterhyphantes melanoxanthus, Sharpe, Cat. B. M. xiii. p. 416 (1890); Shelley, B. Afr. I. No. 514 (1896); Nehrkorn, Kat. Eiers. p. 128 (1899) egg.

Ploceus melanoxanthus, Reichen. Vög. iii. p. 43 (1904).

Adult male. Forehead and crown orange shaded yellow; back of head, hinder half of neck, back and upper tail-coverts glossy jet black; wings and tail uniform, slightly browner black; inner edges of the quills ashy; under wing-coverts buff, mottled with dusky black towards the primaries, and with the bend of the wing bright yellow; a band from the upper mandible through the eye, and the throat, black; remainder of the plumage golden yellow, of an orange shade on the sides of the head and crop, and mottled with black on the flanks and thighs. "Inis crimson; bill black; legs pinky flesh-colour." Total length 5:5 inches, culmen 0.65, wing 2.8, tail 2:0, tarsus 0.85. \mathcal{J} , 12. 11. 85, Manda Isl. (Jackson).

Adult female. Differs in the forehead and crown being black like the entire upper parts and sides of the upper half of the head, with the exception of a complete broad yellow eyebrow; lower half of the head and the entire under parts golden yellow. Wing 2.7. 2, Manda Isl. (Jackson).

Cabanis's Black-and-yellow Weaver ranges in Eastern Africa from the Equator to 7° S. lat., eastward of 29° E. long.

The species has been obtained from as far west as Msukali in the Ukonju country, to the north of Albert Edward Nyanza, by Emin, who also obtained specimens from the western shores of Victoria Nyanza, at Bussisi on the southern end of that lake, and in the Ugogo district at Tubugwe and Mpapwa, where he procured five specimens, so that these Weavers are probably abundant there, although they have not been recorded from further south.

The species was discovered by Hildebrandt at Mombasa, where it has also been obtained by Fischer, whose collections further contained specimens from Arusha, Kipini, Kagebi and the Wapokomo country. At Kipini, on July 17, Fischer found a colony of ten nests, suspended from the extremities of boughs, some nine feet off the ground; they had long entrance passages hanging down. The eggs have been described as of a cream-colour or yellowish white, with underlying marks of greyish violet overlaid with clear reddish or chocolate brown freckles, interspersed with blackish brown dots, most numerous towards the thick end, and measuring, on an average, 0.84×0.55 .

Specimens have been collected by Sir John Kirk at Melinda and Lamu, by Mr. Jackson on Manda Island, and by Erlanger at Kismaju near the mouth of the Juba River. Further north, in the Lake Baringo district, the species is probably replaced by an extremely nearly allied form, *H. malensis*, differing only in the black eye-streak in the male not extending forward in front of the eye.

Heterhyphantes malensis.

- Ploceus melanoxanthus malensis, Neumann, Orn. Monatsb. 1904, p. 162 Stefanie L., Rudolf L.
- ? Heterhophantes melanoxauthus (Non. Cab.), Sharpe, P. Z. S. 1901, p. 619 *Omo R*.

Similar to *H. melanoxanthus*, from which it differs only in the black eye-stripe in the full plumaged male not extending forward in front of the eye.

The Malo Black-and-yellow Weaver inhabits Western Gallaland.

The types, a male and female, were discovered early in 1901 by Mr. Oscar Neumann at the Barassa River in Maloland, and the species is apparently known only from the country adjoining the Lakes Rudolf and Stefanie. To this form should belong a hen bird obtained by Dr. Donaldson Smith at the Omo River, and now in the British Museum, but as the females are not distinguishable from those of *H. melanoxanthus*, the value of the one specific character of this form is based on a single

specimen, which may possibly be only a variety of *II*. *melanoxanthus* and not even a local subspecies.

Genus XVI. HYPHANTURGUS.

Similar in general characters to the last five genera, from which its members may be most readily distinguished by the pale edges to the feathers of the wings and tail. It is characterised by the bill being slender and somewhat elongated; sexes alike in plumage excepting in the throat being black in the males only; back, closed wing and tail uniform olive green.

Hyphanturgus, Cab. Mus. Hein. i. p. 182 (1851) H. ocularius.

The genus is confined to Tropical and South Africa, and comprises three species.

These birds are not gregarious and do not breed in colonies. The nest is oval and slight, suspended from grass-stalks or leaves, and is constructed of grass or fibres, thinly lined with hair and vegetable down. They lay two or three whitish eggs spotted with red.

KEY TO THE SPECIES.

a. Bill black	Adults.
a^{1} . Sides of head yellow, with a black band through	
the eye; males with the throat black; females	
with the throat yellow.	
a^2 . Bill slightly longer with a sharper end; crown	
pale yellow, shading into olive on the nape	ocularius.
b ² . Bill slightly shorter and less sharply pointed.	
a ³ . Entire crown tawny yellow	brachypterus, 3.
b ³ . Entire crown olive	brachypterus, 2.
b ¹ . Entire head black; throat black in males, and	
chestnut with the chin only black iu females	alienus, 🕺 2
b. Bill paler and brown; crown olive	immature.

Hyphanturgus ocularius.

Ploceus ocularius, Smith, Proc. S. Afr. Inst. 1828, Nov.; id. Ill. Zool S. Afr. Aves, pl. 30, fig. 2 (1839); Reichen. Vög. Afr. iii, p. 45 (1904). Hyphanturgus ocularius, Shelley, B. Afr. I. No. 520 (1896).

Sitagra ocularia, Sharpe, Cat. B. M. xiii. p. 427 (1890); Nehrkorn, Kat Eiers. p. 129 (1899) egg; Shortridge, Ibis, 1904, p. 176 Pondoland.
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Type.

Ploceus gutturalis, Vig. P. Z. S. 1831, p. 92 Algoa Bay.

Hyphantornis crocata, Hartl. Abhandl. nat. Ver. Brem. 1881, p. 100 Magungo.

Ploceus ocularius crocatus, Reichen. Vög. Afr. iii. p. 46 (1904).

- Hyphantornis aurantius (non Vieill.), Böhm, J. f. O. 1885, p. 70 Msima R.
- Hyphantornis brachypterus (non Swains.), Sharpe and Bouvier, Bull. Soc. Zool. France, 1876, p. 309 Landana (pt. ?).

Sitagra subpersonatus (non Cab.), Grant, Ibis, 1901, p. 621 S. Abyssinia. Male in full plumage. Forehead and crown deep golden yellow, passing into uniform yellowish olive on the nape, hind neck, hack, tail and edges of the wing-feathers; remainder of the wing blackish brown, with the inner margins of the quills ashy buff and the under-coverts pale yellow; a band from the upper mandible through the eye and another broader one down the centre of the throat black; remainder of the plumage golden yellow, with a slight chestrut shade on the sides of the head and towards the black throat, and an olive shade on the flanks. "Iris light golden brown; bill black; feet slaty grey." Total length 6-2 inches, culmen 0.75, wing 3-0, tail 2-4, tarsus 0-9. J. Pinetown (T. S. Ayres).

Adult female. Similar in colouring to the male, with the exception of the chin and throat, which are of the same deep yellow as the cheeks. "Iris pale yellow; bill black; legs grey." Wing 2.75. 2.5.2.75, Pinetown (T. S. Ayres).

Immature. Similar to the female; but differing in the bill being fleshcolour; the olive shade of the upper parts extending forward nearly to the forehead and the black eye-stripe less strongly marked. Wing 2.4. Pinetown (T. L. Ayres).

Smith's Spectacled-Weaver ranges from Loango to the Cunene River, and over Eastern Africa generally from Eastern, Cape Colony into the Upper White Nile district and South Abyssinia.

The more northern specimens have been separated by Hartlaub under the name of *Hyphantornis crocata*, as being slightly smaller and having a shorter bill than the typical *H. ocularius*, but these characters are so extremely slight that 1 cannot draw the line between their geographical range, but shall begin with the birds from the Zambesi southward.

The species has not been found in German South-west Africa nor in Western Cape Colony, but towards its eastern border the type of the species was discovered by Sir Andrew Smith, and Mr. Henry Ellis obtained the type of *Plocens gutturalis* during an excursion inland from Algoa Bay. Specimens have been collected by Atmore at Grahamstown and Eland Post, and the Messrs. Woodward procured a fine series at Eschow, in Zululand. In the British Museum there are specimens from Durban, Pinetown, Maritzburg, Macamac, Swaziland, Mozambique and the Zambesi.

Stark writes : "In the forest districts of the Eastern Colony this beautiful Weaver-bird is a not uncommon resident. In Natal and Zululand it is numerous, but is almost invariably in single pairs, and is somewhat shy in its habits. Most frequently it is met with in the more open 'Bush' or on the wooded banks of streams; occasionally it frequents shrubberies and gardens. It feeds to a limited extent on seeds and small berries, especially those of the wild date palm, but the bulk of its food consists of insects, particularly of wood-bugs and small beetles that frequent the bark and leaves of trees. Sometimes this bird may be seen scraping among the fallen leaves under a bush in its search for insects. The alarm note is harsh and several times repeated, the ordinary call a rather rapid chattering cry. Of all the South African Weaver-birds this species constructs the most beautiful and highly finished nest. Shaped like a retort, with the entrance from below through a long narrow neck, it is suspended from the extremity of a drooping branch, usually, but not invariably, over water. It is closely and strongly woven with fine pliable fibres, generally strips from leaves of the wild date, and although it resembles nests of Sycobrotus bicolor in shape, it is readily distinguishable by its smaller size and much neater and more artistic finish. Occasionally a second and even a third entrance neck is added; this is usually about ten inches long, but a nest in the Albany Museum at Grahamstown has a neck upwards of eight feet long. Another nest of this species in the same collection is entirely woven from black horse-hair, and is a most finished specimen of bird architecture. These Weavers devote several months to the construction of their nests, and frequently abandon a partly constructed one to commence another close by. Sometimes a new nest will be suspended from the old one of the preceding year. As a rule Smith's Weaver-bird builds a solitary nest, occasionally wot pairs will build on the same tree, and on one occasion I found a pair of these birds nesting in the midst of a colony of the Spotted Weaver-bird.

"The eggs are two or three in number, white, rather closely spotted with pale red. They measure 0.72×0.54 ."

I do not find the species recorded from the country between the Limpopo and Zambesi Rivers. From the latter locality Capt. Boyd Alexander writes: "Not common. Observed singly or in pairs. It commences to build about the middle of November, and the vicinity of water is always chosen. Attempts at concealing the nest are sometimes made by interweaving fragments of the surrounding leaf into the network of fibre."

In Western Africa the species has been procured by Anchieta at Humbe, Capangombe, Quissange and Pungo-Andongo, and according to his notes it is known to the natives of Benguela as the "Janja." It has been obtained by Mechow at Malange in Angola and by Falkenstein and Petit in Loango. Bohndorff met with it at Kasongo on the Tanganyika side of the Congo.

In Nyasaland it is apparently plentiful, having been procured by Mr. Whyte at Zomba, Mlosa and Tshiromo, by Gen. Manning in Angoniland, and by Mr. J. McClounie at Kikomba, Liwonde and Likangula, who records its native name as being "Lichete."

Böhm met with the species at the Msima River. Fischer collected specimens in Usegua, along the Pangani at Kagehi, Kipini, Mombasa Naiwasha, in Wapokomoland, and several intervening places. They were single or in pairs. A nest he found at Tshara, August 20, was hung about five feet above the ground from the end of a leaf of a young cocoanut palm and contained two naked nestlings, and the mother allowed herself to be caught in the nest. Some of the eggs he took on the coast of Formosa Bay are described as bluish white with small grey spots towards the thick end, and measured 0.78 to 0.84 \times 0.56.

Dr. Stuhlmann, who collected specimens at Lewa in Usambara and at Karogwe on the Rufu River, mentions its native names as "Korombisa" and "Nguja." On Kilimaujaro, Sir Harry Johnston procured two specimens at elevations of 3,200 and 6,000 feet.

On the western side of Victoria Nyanza and in the Upper White Nile district the species has been procured by Emin at Bukoba, in the Mombuttu country, at Langomeri, and at Magungo the type of *Hyphantornis crocata*. In Toru Dr. Ansorge has obtained the species, and Mr. Jackson one at Butiaba, during the expedition to Ruwenzori.

According to M. Oustalet it has been found in Somaliland, and the specimens shot by Mr. Haywood at Owaramulka in South Abyssinia are in winter plumage, but appear to me to belong to this species and not to *Sitagra subpersonata*. According to Mr. Pease: "They spent most of their time running about the branches and probably feeding on insects."

Hyphanturgus brachypterus.

Ploceus brachypterus, Swains. B. W. Afr. i. p. 168, pl. 10 (1837) Senegal.

Hyphanturgus brachypterus, Shelley, B. Afr. I. No. 521 (1896).

Sitagra brachyptera, Sharpe, Cat. B. M. xiii. p. 429 (1890); Nehrkorn, Kat. Eiers. p. 129 (1899) cgg.

Ploceus ocularius brachypterus, Reichen. Vög. Afr. iii. p. 47 (1904). Ploceus flavigula, Hartl. Rev. Zool. 1845, p. 406 Aecra.

? Ploceus melanops (Non. Des Murs), Hartl. Abhandl. nat. Ver. Hamb. ii. p. 46 (1850) Sierra Leone.

Adult male. Similar to that of S. ocularius, from which it differs in the yellow of the head extending on to the nape and being slightly more shaded with chestnut; the bill is also rather shorter and stouter. Iris yellowish brown; bill black; feet slaty grey. Total length 5.6 inches, culmen 0.7, wing 3.0, tail 2.2, tarsus 0.9. \mathcal{J} , 24. 2. 72, Abouri (Shelley).

Adult femalc. Differs in the olive of the upper parts extending forward to the forehead and in the throat being light yellow of a paler shade than the cheeks and crop. "Iris pale stone-colour; bill black; legs light bluish grey." Wing 2.9. \Im , Shonga (Forbes).

Swainson's Spectacled-Weaver ranges over West Africa from Senegambia into Gaboon.

The species is apparently fairly abundant and evenly distributed throughout its range, with perhaps the exception of Gaboon. In its habits it closely resembles H. ocularius. The nest, according to Dr. Reichenow, is suspended at a short distance from the ground to a twig or the leaf of a young palm; is oval, with a long entrance passage hanging down of some 7.5 inches long, and the body of the nest measured 4.75×3.25 . The eggs were two in number, of a pale buish green or whitish ground with clear reddish brown spots, and measured 0.8×0.55 . Dr. Büttikofer found a nest on November 14, in Liberia, containing two eggs of a dirty white, sprinkled all over, especially at the thicker end, with reddish brown. The nest was most solidly and artistically constructed of long elastic fibres and was hung at a height of some eight feet from the ground.

The type of the species was received by Swainson from Senegal. Specimens have been procured by Marche and De Compiègne at M'bao, by Dr. Rendall at the Gambia, by Verreaux at Casamanse, by Fea on Bulama Island, by Dr. Hartert on Los Island and by Sabine at Sierra Leone. From

this latter locality came the type of *Ploceus melanops*, Hartl., which apparently differed from the ordinary female of this species in having the two centre tail-feathers black, a very abnormal colouring of the tail for any of the Weaver-birds; possibly it was afterwards found that these black centre tailfeathers did not truly belong to the specimen, and that may account for the type having disappeared. However, this is of no great consequence, as the name *Ploceus melanops* had previously been employed by Des Murs in Lefebvre's "Voyage en Abyssinie," p. 110, to take the place of *P. melanotis* (non Lafr.), Guérin.

Demery collected a large series of specimens along the Sulymah River, and close to Sierra Leone Mr. Kemp found the species common at Rotifunk and Bo, and writes: "They were much lighter sleepers than Spermestes cucullatus and S. fringilloides, who roosted in an adjoining tree, and when aroused at night the flutter of their wings against the leaves made a noise like a waterfall. A palm-tree in the station-yard bore considerably more than a hundred of their nests and was the scene of great excitement in the mornings and evenings. During and after the rains these Weavers assemble sometimes in quite large flocks and fly together after the manner of Starlings, turning and twisting in the air, changing from yellow to green as their breasts or backs became most exposed to view." In Liberia it has been obtained by Dr. Büttikofer at Robertsport and Oldfield; on the Gold Coast, Mr. Boyd Alexander, who met with the species at Cape Coast, Prahsu, Gambaga and Pong, writes: "This is a common species in the wooded portion of the Colony, but not in the hinterland. In the immature bird the npper mandible is pale brown, the lower one light horn-colour." Buckley and I frequently met with the species in pairs on Connor's Hill, close to Cape Coast, also at Abouri in the Aguapim Mountains and along the Accra coast.

HYPHANTURGUS ALIENUS

A hen bird, the type of *Plocens flavigula*, was obtained at the latter place, and specimens have been also collected by Sintensis at Chama, by Blissett at Bula Road in Wassa, and at the Volta River by Ussher. In Togoland the species has been obtained by Dr. Büttner at Bismarckburg and by Mr. Baumann at Kussuntu and Agome Tongwe. In the British Museum there are specimens from Abeokuta, Shonga, Fernando Po, Camaroons, and one of Emin's from Kibiro on the west coast of the Albert Nyanza, which is the most eastern range known for the species. It is apparently abundant throughout Camaroons and on the Island of Fernando Po. In Gaboon, Du Chaillu collected specimens at Cape Lopez, Rembo and at the Ogowé River, in which district it has been procured by Marche at Doumé, and the species has not been recorded from further south.

Hyphanturgus alienus. (Pl. 39, fig. 2.)

Sitagra aliena, Sharpe, Bull. B. O. C. xiii. p. 21 (1902) Ruwenzori. Ploceus alienus, Reichen. Vög. Afr. iii. p. 68 (1904).

Type, adult male. Entire head and the throat black; back and sides of neck, back, wing and tail olive yellow; inner webs of quills blackish brown, with their margins brownish buff; under wing-coverts dull yellow, with a dusky patch near the primaries; a fairly broad chestnut margin separating the black of the middle and lower throat from the deep yellow of front half of the neck and middle breast; flanks and thighs olive yellow; under tail-coverts rufous shaded yellow. Bill black; feet pale brown. Total length 5-8 inches, culmen 0.75, wing 2.8, tail 2-2, tarsus 0.8. \mathcal{J} , 13. 2. 02, Ruwenzori (Jackson).

Adult female (?) Differing from the type in the throat being deep chestnut, with a large black chin-patch. Wing $2 \cdot 6$. 10. 2. 02, Ruwenzori.

Immature. Differing from the type in the top and sides of the head being olive like the back, but mottled with a few black feathers; under parts rather paler olive, washed and slightly mottled with rufous and a few black feathers on the chin; a central patch on the breast pale yellow. Bill brown, with the under mandible whitish. 9, 13, 2, 02, Ruwenzori.

The Alien Weaver is a native of the Ruwenzori Mountains.

The species was discovered in the Ruwenzori Mountains, where four specimens were collected in February, 1902, comprising, what I look upon as adults of both sexes, and an immature female with a few of the black feathers showing on the head and chin and a trace of an approaching chestnut throat. The adults are all marked "male," but they were not sexed by Mr. F. J. Jackson, and I feel confident that one of them is in the full breeding female plumage, for these specimens show that, like the other members of this genus, the adult males only have the black throat, and in the structure as well as in the peculiar uniform olive colouring of the back, wings and tail, the present species closely resembles *U*. *ocularius*.

Genus XVII. SITAGRA.

Most nearly allied to *Hyphantornis* in both structure and colouring, especially evident on comparing the type, *S. luteola*, with *Hyphantornis intermedius*; but the bill is always more slender.

 Type.

 Sitagra, Reichenb. Av. Syst. pl. 79 (1850)

 Icteropsis, Pelz. Verh. z.-b. Ges. Wien. xxxi. p. 149 (1881)

 S. pelzelni.

 The genus is confined to Tropical and South Africa and comprises four species, which are very similar in their habits to Hyphanturgus.

KEY TO THE SPECIES.

a. Bill long; only the hinder third of crown yellow.		
a^1 . Larger; wing 2.7		subpersonata.
b^1 . Smaller; wing $2\cdot 4$.		pelzelni.
b. Bill shorter; quite half of hinder crown yellow;	wing	
2.25.		
c ¹ . Bill more slender ; plumage brighter and darker.		personata.
d^1 . Bill stouter; plumage paler		luteola.

Sitagra subpersonata.

Hyphantornis subpersonata, Cab. J. f. O. 1876, p. 92 Chinchonxo.
Sitagra subpersonata, Sharpe, Cat. B. M. xiii. p. 427 (1890 pt., d).
Ploceus subpersonatus, Reichen. Zool. Jahrb. 1886, pl. 5, fig. 4; id. Vog. Afr. iii. p. 74 (1904).

Hyphanturgus subpersonatus, Shelley, B. Afr. I. No. 523 (1896).

Adult male. Forehead, most of the crown, sides of head and the throat jet black; hinder portion of head, sides of neck, breast, thighs and under tail-coverts chestnut shaded yellow; back olive, with a rufous yellow shade towards the tail-coverts; wings and tail brownish black, with olive edges to the feathers. Bill black. Total length 5-6 inches, culmen 0.7, wing 2.7, tail 1.9, tarsus 0.8. σ , 2.83, Landana (Petit).

The Loango Slender-billed Weaver inhabits the Loango coast.

The type was discovered by Falkenstein at Chinchonxo. In the British Museum the species is represented by a single specimen, an adult male obtained by Petit at Landana.

The other females and immature specimens which have been referred to this species from Landana, and from Owaramulka in Southern Abyssinia, I refer to *Hyphanturgus ocularius*, and as a female specimen obtained by Dr. Preuss agrees with Dr. Sharpe's description, taken from the Landana specimens, I do not feel justified in extending the known range of *S. subpersonatus* beyond the boundary of the Loango Coast.

Sitagra pelzelni.

Sitagra pelzelni, Hartl. Zool. Jahrb. 1887, p. 343, pl. 14, figs. 9, 10 Magungo; Shelley, B. Afr. I. No. 526 (1896).

Icteropsis pelzelni, Sharpe, Cat. B. M. xiii. p. 410, fig. head (1890). Ploceus pelzelni, Reichen. Vög. Afr. iii. p. 75 (1904).

Male in full plumage. Forehead, more than half of the crown, sides of head and the throat jet black, remainder of the head and neck bright canary yellow like the entire breast, thighs and under tail-coverts; back of neck, back, upper tail-coverts and tail yellowish olive; wings blackish brown, with the edges to the feathers olive yellow, inclining to yellowish buff at the ends of the median coverts and the edges of the greater coverts

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and inner secondaries; inner margins of the quills and under wing-coverts buff, the latter washed with yellow, especially along the bend of the wing.
"Iris brown; bill black; feet leaden grey." Total length 5 inches, culmen 0.65, wing 2.4, tail 1.7, tarsus 0.8. 3, 10.8.85, Wadelai (Emin). Adult female. Differs from the last only in having the forehead, front

Adult female. Differs from the last only in having the forehead, front of crown, sides of head and the throat yellow of the same shade as the breast; hinder crown olive yellow like the back of the neck and mantle, Total length 5-1 inches, culmen 0.6, wing 2-2, tail 1.7, tarsus 0.75. ς , 10. 8. 85, Wadelai (Emin).

Immature. Similar to the adult female, but differing in the bill being pale and the olive yellow of the upper parts extending forward to the forehead.

Pelzeln's Slender-billed Weaver inhabits the Equatorial lake district.

No mention has yet been made regarding its habits, which probably resemble those of *S. luteola*, and it is apparently partial to the neighbourhood of water, as it ranges round the southern and western shores of Victoria Nyanza from Kageyi on Speke's Gulf, where it has been obtained by Fischer, to Ntebbe; at the latter place Mr. Jackson collected four specimens and obtained others at Toro, and on Kama Island, where it had previously been met with by Mr. Neumann. The species has been procured as far west as the Albert Edward Nyanza by Dr. Ansorge, during his halt at Fort George; Emin discovered the types at Magungo, where the Nile flows out of the Albert Nyanza, and he has also collected a fine series of specimens at Wadelai, which is the most northern range known to me for the species.

Sitagra monacha.

Sitagra monacha, Sharpe, Cat. B. M. xiii. p. 426 (1890); Shelley, B. Afr. I. No. 525 (1896); Nehrkorn, Kat. Eiers. p. 129 (1899) egg; Hartert, Nov. Zool. 1901, p. 344 Niger.
Ploceus monachus, Reichen. Vög. Afr. iii. p. 75 (1904).
Ploceus personatus (non Vieill.), Jard. Contr. Orn. 1849, p. 35, pl. 7.

SITAGRA MONACHA

Male in full plumage. Similar to S. luteola, from which it differs only in the colours being slightly darker and brighter and the black extending a little further over the crown. Iris brown; bill black; feet greyish brown. Total length 4:5 inches, culmen 0:55, wing 2:25, tail 1:6, tarsus 0:7. $\vec{\sigma}$, 14. 2. 72, Cape Coast (T. E. Buckley).

Adult female. Differs in having the forehead, front of crown, sides of head and the throat golden yellow like the breast, thighs and under tail-coverts; hinder crown and back of the neck uniform olive yellow like the entire back. Wing 2.15. 9, 2. 2. 72, Cape Coast (Shelley).

Young. Similar to the female, but slightly duller, and the abdomen paler; bill, with the upper mandible pale horn and the under one white. (Sjöstedt.)

The Palm Slender-billed Weaver ranges from the Gold Coast to the Congo.

The name of this species was, I believe, entered by accident in Dr. P. Rendall's list of Gambian birds, and it has not otherwise been recorded from further north than the Gold Coast.

In the British Museum it is represented from Ashantee, Fantee, Volta River, Niger, Gaboon and Landana.

When I was on the Gold Coast I found the species well known there as the Palm-birds, and the nests, I believe, of this species were suspended from beneath the leaves of the cocoanut palms, as many as four or five hanging from one frond. These nests were oval with a short entrance passage and were slenderly but strongly built, apparently of shreds of the palmleaves, and were of a pale brownish buff, so they may have been built the previous year. We found the males in February and March in full plumage, but never saw them in the act of building. Ussher during his expedition up the Volta River found them tolerably common in small flocks. Yet the species is not included in Mr. Boyd Alexander's collection from the Gold Coast, nor is it mentioned in any of the collections from Togoland.

Jardine received the species from Old Calabar, Marche met with it at Bonny, Dr. Ansorge in this district, and Forbes

procured specimens at Egga. In Camaroons Dr. Reichenow found these Weavers plentiful at Wuri along the river-bank, suspending their nests from twigs or grass-stalks overhanging the water, and Mr. Sjöstedt found them also in abundance at Bibundi, avoiding the thick bush, and he took a nest in August containing two pure white eggs. The eggs measure 0.7 \times 0.52.

The species has been procured by Du Chaillu at the Camma River, by Falkenstein at Chinchonxo, by Petit at Landana, and by Bohndorff at Manyanga and Stanley Falls of the Congo River, and I cannot trace its range any further south or east.

Sitagra luteola.

Fringilla luteola, Licht. Verz. Doubl. p. 23 (1823) Senegambia.

Sitagra luteola, Sharpe, Cat. B. M. xiii. p. 425 (1890); Shelley, B. Afr. I. No. 524 (1896); Nehrkorn, Kat. Eiers. p. 128 (1899) egg.

Ploceus luteolus, Reichen, Vög. Afr. iii. 76 (1904).

Ploceus personatus, Vieill. Gal. Ois. i. p. 117, pl. 84 (1834) Senegal.

Fringilla (Acanthus) chrysomelas, Heugl. Syst. Uebers, p. 41 (1856, nom. nud.) Kordofan, Sennar.

Ploceus miuutus, Von. Müll. Naum. 1851, pt. 4, p. 28 S. Nubia.

Fringilla mülleri, Bald. l. c. p. 28.

Male in full plumage. Forehead, about half of the crown, sides of head and the throat black; remainder of the head and neck bright canary yellow, like the entire breast, thighs and under tail-coverts; back of neck, back, upper tail-coverts and tail yellowish olive; wings blackish brown, with the edges of the feathers olive yellow, inclining to yellowish buff at the ends of the median coverts, edges of the greater coverts and inner secondaries; inner margins of the quills and the under wing-coverts buff, the latter washed with yellow, especially along the bend of the wing. "Iris burnt sienna; bill black; legs horn-colour" (Blauford). Total length 4.7 inches, culmen 0.5, wing 2.5, tail 1.6. tarsus 0.7. σ , 23. 5. 84, Kiri (Emin).

Adult female. Differs in having no black on the plumage; upper parts mostly ashy brown, washed with yellow on the forehead, erown, back of neck, rump and upper tail-coverts, and mottled with dark centres to the feathers of the mantle; eyebrows, sides of head and the throat pale yellow; breast white, mottled with yellow; under tail-coverts pale yellow. Bill blackish. 2, 8, 5, 84, Redjaf (Emin).

SITAGRA LUTEOLA

Lichtenstein's Slender-billed Weaver ranges from Senegambia to the Red Sea and southward into Kavirondo.

The type came from Senegambia. The species formed part of Bulger's collection from Bulama Island; Marche and De Compiègne obtained it at Bathurst, where Dr. P. Rendall considered it to be rare, while Mr. J. L. Budgett found it to be abundant at Nianimaru, and this is all that is known to me regarding its occurrence in West Africa.

The species has a much wider range on the eastern side of the continent and has been met with as far south as Kwa Kitoto, in Kavirondo, by Mr. Oscar Neumann. Mr. Jackson found these Weavers breeding in August at Elgeyu; he also met with them at Njemps and the neighbouring valley of Guasa Molo in September, and remarks: "Nest with a long pipe to the entrance."

In the British Museum there are specimens from Larabat and Lake Boringo (Delamere), Omo River (Donaldson Smith), Uganda (MacCarthy Morrogh), Lado, Keri and Redjaf (Emin), Zeraf River (Dunn), Kaka, Fashoda and Goz-abu-Gumar (Hawker), Kordofan (Murray), Anseba River (Blanford), Bejook and Gonfalon (Jesse).

Mr. Jesse found these Weavers breeding early in August. The nest was oval with a long tubular entrance, and contained two white eggs. According to Heuglin they assume their bright plumage in May, commence breeding about the middle of July, and the young are able to fly in October and November. They live mostly in pairs, usually frequenting the water-courses in wooded districts, avoiding the more desert parts. The nest is small, of an elongated oval form, lightly constructed of shreds of leaves or bark, with a little hair or cotton for a lining, and is suspended from the twigs, generally of an acacia-tree, at some twenty feet from the ground. The eggs, two or three in number, are pure white, measuring 0.68×0.48 .

HYPHANTORNIS

Genus XVIII. HYPHANTORNIS.

Very similar to the last seven genera I have recognised, with a few hair-like plumes on the nape and back of neck; bill fairly stont; culmen broad, rounded, moderately curved, the base ending in a shallow angle on the forehead; nostrils opening in front of the frontal feathers; cutting edges of mandibles slightly waved; wings rounded; primaries 1 more than a third of the length of 2 and reaching beyond the end of the coverts, 3, 4, and 5 longest and about equal. Tarsi, feet and claws fairly strong, pale brown or flesh-colour; hind toe with claw equal in length to middle toe with claw; claws sharp and much curved. Plumage of the sexes alike in colouring of the wings and tail, which have pale edges to all the feathers; but the other parts, especially the head and neck, are very dissimilar during the breeding season, when only the males have the sides of the head and a portion of the throat black.

		i gpe.
Hyphantornis, Gray, Gen. B. ii. p. 351 (1849) .		H. cucullatus.
Hypermegethes, Reichen. J. f. O. 1903, p. 149.		H. grandis,

KEY TO FULL PLUMAGED MALES.

 a. Throat with the black extending to the crop. a¹. Head not entirely black, nor the mantle yellow with a broad black scapular band on each side. 	
a ² . Mantle almost uniform yellowish olive.	
<i>a</i> ^s . Forehead black.	
a ⁴ . Black frontal patch extending back beyond	
the eyes.	
a^5 . Nape and crop more shaded with rufous .	intermedius.
b^{5} . Nape and crop clearer yellow	cabanisi. =
b^4 . Less black on the crown.	
c ⁵ . Black frontal patch extending back to the	
middle of the eyes.	
a ^e . Upper parts more sulphur-shaded olive;	
rump clear sulphur yellow; mantle with	
narrow dark stripes; wing 3.0	velatus.
b ⁸ . Upper parts duller olive; rump partly	
washed with olive; mantle more	
strongly striped; wing 3.1 to 3.4.	mariquensis.
d ⁵ . Black forehead not extending back be-	
youd base of culmen.	
c ⁶ . Ear-coverts entirely black	tahatali.
d^{6} . Hinder half of ear-coverts rufous and	
yellow	tæniopterus.

HYPHANTORNIS

b ³ . Entire forehead and crown golden yellow b ² . Mantle less uniform; forehead and crown yellow.	heuglini. 😙 🤤
 c³. Mantle feathers olive yellow, with black angular centres. d³. Mantle-feathers black, with broad yellow edges b¹. Head entirely black, or the mantle yellow with a broad black scapular-band on each side. c². Mantle strongly mottled with yellow and black. e³. Mantle evenly mottled, the feathers jet black, with broad yellow ends. 	spekei.
c ⁴ . Black of head and throat surrounded by clear yellow.	nıgriceps. – 🐃
 d⁺. Black of head and throat surrounded by chestnut. f³. Mantle bright yellow with a broad black scapular- 	collaris.
 band on each side. e⁴. Entire head and throat black, margined with a broad band of deep chestnut f⁴. Black of crown separated from the hinder balf of the black car-coverts by the colonr of 	cucullatus. 🦂 🤊 💈
f^{5} . Black of head not extending so far back on the crown and margined on sides of neck by a patch of clear yellow	bohndorffi. abyssinicus.
 d². Mantle uniform. g³. Larger; wing more than 4 inches; culmen 1·1; a chestnut collar separating the black head from the olive back and yellow breast. h³. Smaller; wing not more than 3·5. g⁴. Mantle black or brown. 	grandis. c
 g⁵. Mantle black; edges of wing-feathers and centre of the breast yellow h⁵. Mantle brown. 	weynsi 1 ^
 e⁶. No yellow on plumage; back and chest uniform cinnamon	rubiginosus. badius.
black of the hind neck and head; under parts mostly chestnut, with which the yel- low thighs strongly contrast	jacksoni. – 🐇

 k⁵. A yellow collar separating the black head from the olive shaded mantle. g⁶. Breast partly shaded with chestnut. a⁷. Entire chest shaded with chestnut; the yellow thighs not contrasting with 	
their surroundings	dimidiatus.
b^7 . Front and centre of chest only	
shaded with chestnut ,	capitalis.
h^6 . Breast entirely yellow	melanocephalus. 🔪 👘
b. Throat with the black confined to the upper half.	
c^1 . Larger; wing more than 3 inches.	
e ² . Entire head black	nyasæ.
f^2 . Forehead and crown orange yellow, with a black	
crescent on the nape	bertrandi.
d^1 . Smaller; wing less than 3 inches; some black on	
forehead; no black on crown or nape.	
g^2 . Mantle more uniform, not distinctly striped.	N. 191
i^3 . Slightly less black on the forehead	vitellinus.
k^3 . Slightly more black on the forehead.	
<i>i</i> ⁴ . Crop and breast yellower	
k ⁴ . Crop and breast more rufous	
h^2 . Mantle distinctly striped	uncolatus.

Hyphantornis intermedius.

- Ploceus intermedius, Rüpp. Syst. Uebers, pp. 71, 76 (1845) Show; Reichen, Vog. Afr. iii, p. 72 (1904).
- Hyphantornis intermedius, Sharpe, Cat. B. M. xiii. p. 460 (1890); Shelley, B. Afr. I. No. 550 (1896).
- Hyphantornis erythrothalmus, Heugl. J. f. O. 1867, p. 386 Abyssinia.
- Hyphantornis cabanisi, Peters, J. f. O. 1868, p. 133 Inhambane; Sousa, Journ. Lisb. 1886, p. 85 Ibo Isl.; Sharpe, Cat. B. M. xiii. p. 461 (1890); Shelley, B. Afr. I. No. 551 (1896); Nehrkorn, Kat. Eiers. p. 130 (1899) egg.

Ploceus cabanisi, Reichen. Vög. Afr. iii. p. 73 (1904).

Ploceus lübberti, Reichen. Orn. Monatsb. 1902, p. 77 Damara.

Male in breeding plumage. Entire front half of the head, ear-coverts and throat black; remainder of head, sides of neck and the under parts golden yellow, slightly shaded with chestnut on the nape and erop; back and upper tail-coverts olive yellow, with indistinct dusky shaft-stripes to the feathers of the mantle; tail olive brown, with narrow yellow edges to the feathers; wings blackish brown, with pale yellowish edges to the feathers; inner edges of the quills brownish buff; under wing-coverts

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white, partly washed with yellow, and shading into bright yellow along the edge of the wing. "Iris yellow; bill black; legs slate-colour." Total length 5 inches, culmen 0.6, wing 2.8, tail 1.8, tarsus 0.85. \mathcal{J} , 18. 3. 01, Daira Aila (Pease).

Adult female. Differs in having no black on the head; forehead, crown and mantle ashy brown, slightly washed with yellow; eyebrows, sides of head, throat and crop whitish yellow; remainder of the under parts white, mottled with pale yellow, and shaded with ash on the flanks and thighs. "Iris yellow; bill dusky; legs slate-colour." Wing 2.7. \$, 18. 3. 01, Daira Aila (Pease).

The Intermediate Masked-Weaver ranges southward from Southern Abyssinia, Shoa and Angola into Natal.

This species is small and so very similar in colouring to Sitagra luteola that it really forms an intermediate link between the genera Sitagra and Hyphantornis. The species has been divided into H. intermedius, Rüpp., as a northern form, and H. cabanisi, Peters, as its representative subspecies from south of the Equator, under the impression that the former has the hinder crown and the crop more shaded with chestnut than in specimens from south of the Equator, but even this slight character, which requires a stretch of imagination to appreciate, does not appear to me to be constant.

Like all the members of the genus *Hyphantornis*, they are gregarious throughout the year, breed in colonies and construct oval nests, which are suspended from reeds or boughs of trees. The eggs of this Weaver have been described by Mr. Woodward and Fischer as uniform white; they measure 0.88×0.55 .

The species is represented in the British Museum by full plumaged males from Damaraland, Bamangwato, Matabele, Nyasaland, Pangani, Lamu, Daira Aila, and Shoa. The most northern range known for the species in West Africa is Loanda, where Toulson procured a specimen. It has been recorded from the Quanza River on the authority of Mr. Whiteley; Anchieta found it at Benguela and Quillengues known to the natives as the "Janja." Prof. Bocage remarks that in all these specimens, with the exception of one from Quillengues, the rufous shade on the back of the head, throat and breast is well marked. From Damaraland there are three of Andersson's specimens in the British Museum, an adult male from Omaruru and the other two from the Swakop River.

I cannot trace the range of this species into Namagualand nor Cape Colony, and from Natal it is known to me by a female specimen obtained by Mr. T. L. Ayres at Durban. This specimen is probably rightly determined, for in Zululand the Messrs, Woodward procured two adult males at Eschowe, where they were nesting in reeds in the middle of December. T. E. Buckley obtained four full plumaged males in Bamangwato in October and one in the Matabele country, where it has also been met with by Frank Oates at the Tatti River. Mr. Boyd Alexander procured a full plumaged male at the Zambesi, and Mr. Whyte a similar specimen at Mpimbi, in February ; those collected by Sir Alfred Sharpe at Tshiromo, in September, and at Palombe, are in winter plumage, much resembling the females of this species and of II. tahatali. Along the Mozambique coast Peters obtained the type of II. cabanisi at Inhambane, and specimens have been procured by Serpa Pinto on Ibo Island, by Fischer at Pangani, Usambara country, Victoria Nyanza, and at Malinda, and by Sir John Kirk at Lamu.

For those naturalists who prefer to recognise *H. cabanisi* as a subspecies of *H. intermedius*, the following notes would refer to the latter. The occurrence of the species in Somaliland is known to me by Prince Ruspoli's specimens and one procured by Mr. Pease at Hensa. In Southern Abyssinia specimens have been collected by Lord Lovat and Mr. Pease ; two of these are males in imperfect plumage, shot December 1

HYPHANTORNIS VELATUS

and January 18, at Hülül and the Kassim River; the others, a pair in full plumage, March 18, at Daira Aila, where they were nesting in large trees near the wells in the low country. Besides these specimens there is in the British Museum the type, which was discovered by the late Sir W. C. Harris in Shoa. In this latter country Dr. Ragazzi procured a male in breeding plumage at Gherba, August 3; so the species apparently retains the nuptial dress for the six summer months. I do not find the species positively known from further north or west in North-east Africa, for the specimens procured by Heuglin of his *H. erythrothalma* were females or males in similar plumage, obtained by him at Galabat and Gedaref, and although he referred them afterwards to H. intermedius, they may belong to the commoner species of that country H. twniopterus, for it is very doubtful if those two species can be distinguished by their form or colour when they are in the winter or female plumage.

Hyphantornis velatus.

Ploceus velatus, Vieill. N. Diet. xxxiv. p. 132 (1819) Namaqua ; Reichen. Vög. Afr. iii. p. 78 (1904 pt.).

Hyphantornis velatus, Bocage, J. f. O. 1876, p. 425 *Humbe*; Sharpe, Cat. B. M. xiii. p. 464 (1890 pt.) *Benguela*; Shelley, B. Afr. I. No 549 (1896 pt.).

Male in full plumage. Entire forehead, sides of head and the throat black, the black forehead extending back to the middle of the eyes; remainder of crown, sides of upper neck and the under parts pale bright yellow, very slightly shaded with chestnut on the crown and next to the end of the black throat; hind neck and back dull sulphur shaded olive, with the rump entirely bright sulphur yellow; tail yellowish brown, with narrow yellow edges to the feathers; wings blackish brown, with pale yellow edges partly inclining to ashy buff; inner edges of the quills and the under wingcoverts buffy yellow. "Iris red; bill black; feet pale brown." Total length $6\cdot 2$ inches, culmen 0.65, wing 3.0, tail 2.1, tarsus 0.9. \mathcal{J} , 2.75, Humbe (Anchieta).

The Namaqua Masked-Weaver ranges over South-west Africa from Benguela into Cape Colony, and is replaced further east in South Africa by an extremely nearly allied form, *H. mariquensis*.

The type of *Ploceus velatus*, Vieill., came from Namaqualand. In the British Museum there are two full plumaged males, collected by Anchieta at Humbe, which agree perfectly with one of Mr. Butler's specimens from Cape Colony, probably from the western side; in all three the wings measure exactly 3.0 inches and the black forehead is broad, reaching well beyond the base of the culmen, but they differ from other males from Cape Colony and Natal in being slightly smaller, with a weaker bill, and in the more sulphur yellow shade of the upper parts, the rump being clear uniform sulphur yellow. The following remarks may apply to this species or to *H. tahatali*, or in part to each of them.

Anchieta, who has procured specimens also at Benguela, Quillengues, gives as their native names "Dicole" and "Janja." Dr. Büttikofer records it in the collection made by Kellen during his residence at Humpata in the Upper Cunene district. Mr. Andersson's remark, that it is "common in Damaraland and the parts adjacent," refers to *II. tahatali*, and probably also to this species, but I have not seen a specimen of the true Namaqua Weaver obtained by him.

Hyphantornis mariquensis.

- Ploceus mariquensis, Smith, Ill. Zool. S. Afr. Aves, pl. 103 (1845) N. of Kurrichaine.
- Hyphantornis mariquensis, Gurney, Ibis, 1868, p. 466, pl. 10; Symonds, Ibis, 1887, p. 332 Kroonstad.

? Ploceus personatns (non Vieill.), Swains. An. in Menag. p. 306 (1837).

Hyphantornis nigrifrons, Cab. Mus. Hein. i. p. 182 (1851).

Ploceus chloronotus, Reichenb. Singv. p. 82, pl. 11, figs. 304, 305 (1863).

Hyphantornis æthiops, Heugl. J. f. O. 1867, p. 380.

Hyphantornis velatus (non Vieill.), Sharpe, Cat. B. M. xiii. p. 464 (1890 pt.) Cape Col., Natal, Transvaal; Kuschel, J. f. O. 1895, p. 333 egg; Nehrkorn, Kat. Eiers. p. 131 (1899) egg; Stark, Faun. S. Afr. B. i. p. 58 (1900); Haagner, Ibis, 1901, p. 16; 1902, pp. 572, 578, Johannesburg; Whitehead, Ibis, 1903, p. 223 Orange R.; Clarke, Ibis, 1904, p. 524 Bloemfontein.

Ploceus velatus, Reichen. Vög. Afr. iii. p. 78 (1904).

Male in full plumage. Differing very slightly from H. velatus. Rather larger; bill stouter; tarsi longer and like the feet larger; upper parts slightly darker, mantle greener; rump more golden yellow, with a slight olive wash. "Iris orange red; bill black; tarsi and feet flesh-colour" (Stark). Total length 6.5 inches, culmen 0.7, wing 3.35, tail 2.5, tarsus 1.0. 3, 13, 10, 81, Newcastle (Butler).

Type, winter plumage. Upper parts ashy brown, slightly shaded with yellow on the head, neck, rump and upper tail-coverts; mantle with blackish brown shaft-bands; tail yellowish brown, with narrow yellow edges to the feathers; all the wing feathers with pale edges, inclining to bright yellow on the quills and greater coverts and fading into buff on the inner feathers and ends of the median coverts; lesser coverts browner like the mantle : inner edges of quills and the under wing-coverts yellowish buff; sides of head like the crown, but fading on the cheeks into whitish yellow like the throat; remainder of the under parts white, with a shade of brown on the flanks and across the fore-cheest. Bill pale, shading into dark brown on the upper mandible. Total length $6\cdot 2$ inches, culmen $0\cdot 7$, wing $3\cdot 1$, tail $2\cdot 4$, tarsus $1\cdot 0$.

The Marico Masked-Weaver ranges from Cape Colony over Southern and Eastern South Africa, south of the Limpopo River.

The types, being in winter plumage, would be difficult to distinguish from H. tahatali by the coloured illustrations or the original description, had not the wing measurement been given as 3⁻¹ inches, which shows that it belongs to the large form. The full plumaged male has been well figured as H. mariquensis (Ibis, 1868, pl. 10).

With regard to the habits of the species, Stark writes: "These Weaver-Birds are gregarious at all seasons of the year, and in summer frequently form very large breeding colonies, often consisting of several hundred pairs of birds. Frequently

they commence building their kidney-shaped nests very early in the spring, towards the end of July or beginning of August, when many of the males still retain their immature or winter dress, but the nests are not completed, or the eggs laid, as a rule, until the beginning of November. As a breeding place these birds prefer reed-beds, if any are available, but should there be none, they suspend their nests from trees and bushes overhanging water, or occasionally over dry ground. When built among reeds, the nests are usually attached to two stems by the sides; but when in trees they are suspended from the drooping twigs. Like most of the Weaver-Birds this species becomes very tame during the breeding season, and it is a pleasing sight to watch the busy birds as they are engaged in constructing their ingeniously formed nests. They work with the greatest energy, the male fetching the long green grassstems out of which the nests are woven, and usually assisting from the outside by passing one end through to the female inside the nest, she passing it back again, and so on. Whilst engaged at this work the birds frequently hang back downwards with extended wings, swaying gently to and fro, and all the time keeping up a ceaseless chattering. In districts where the Sanseviera grows the nests of the Masked Weaver-Birds are often constructed entirely of the marginal fibres of this plant.

"The entrance to the nest is from below, the nest itself being shaped like a retort without a neck, or the shell of a garden snail. Although this species subsists largely on grain and grass-seed during winter, it feeds freely on insects during summer. The young are fed on soft larvæ, caterpillars and small grasshoppers. They remain in the nest for about thirty days. The eggs of this Weaver, usually three in number, vary remarkably in colour, even in the same nest. They are of some shade of white, cream-colour, pink, green, or blue; often unspotted, but more frequently marked, more or less thickly, with small spots and dots of various shades of red and brown; less often they are blotched and clouded heavily with large masses of the same colours.

"They are somewhat elongated in shape and average 0.93×0.58 ."

The species is well represented in the British Museum from Cape Colony, Deelfontein, Natal; five of Sir Andrew Smith's typical specimens all in winter plumage, also by full plumaged males from the Transvaal, Potchefstroom and Macamac.

Major Clark informs me that they are abundant at Bloemfontein, and were passing into summer plumage about September 1, and had laid eggs by September 7 in some nests he found suspended from a willow over the water; but as they also breed in fruit trees they are disliked by the farmers, owing to a habit they have of cutting off all the leaves and twigs which surround their nests.

Hyphantornis tahatali.

Ploceus tahatali, Smith, Rep. Exped. C. Afr. p. 50 (1836) N. of Orange R. Ploceus auricapillus, Swains. An. in Menag. p. 346 (1838) S. Afr.; Reichen. Vög. Afr. iii. p. 79 (1904).

- Hyphantornis melanops (non Des Mnrs, and Hartl.), Cab. J. f. O. 1884, p. 240, pl. 3, fig. 2 Zambesi ; Reichen. J. f. O. 1885, p. 374.
- Hyphantornis shelleyi, Sharpe, Cat. B. M. xiii. p. 464 (1890) Damara, Swazi, Tete; Bocage, Jorn. Lisb. 1893, p. 12 Benguela; Shelley, B. Afr. I. No. 543 (1896).
- Hyphantornis velatus (non Vieill.), Sharpe, Cat. B. M. xiii. p. 464 (1890 pt.) Andonga, Damara, Limpopo, Matabele; Shelley, Ibis, 1894, p. 20 Zomba; Marshall, Ibis, 1900, p. 243 Mashona.

Ploceus finschi, Reichen. Orn. Monatsb. 1903, p. 23 Mossamedes.

Ploceus auricapillus finschi, Reichen. Vög. Afr. iii. p. 80 (1904).

Male in full plumage. Front of forehead, sides of head and the throat black, the black of the forehead not extending back beyond the base of the culmen; crown, sides of upper neck and remainder of the under parts bright golden yellow, very slightly shaded with chestnut on the crown and next to the end of the black throat; hinder neck and back yellowish olive; rump

bright golden yellow ; tail yellowish brown, with narrow yellow edges to the feathers ; wing blackish brown, with bright yellow edges to all the feathers ; inner edges of quills and the under wing-coverts pale yellow. "Iris orange red; bill black; tarsi and feet reddish brown" (Alexander). Total length 5-4 inches, culmen 0.6, wing 2.95, tail $2\cdot1$, tarsus 0.9. 3, 23. 11. 73, Limpopo (Buckley).

Type, female in breading plumage. Upper parts pale brown with a yellow shade, rump and edges to tail-feathers slightly yellower; mantle with broad blackish shaft-stripes to the feathers; wings with the lesser coverts like the mantle, ends of median coverts and edges of the other feathers ashy buff or yellow; inner edges of quills and the under wing-coverts yellowish buff; sides of head yellowish brown like the crown; cheeks and under parts yellow, slightly paler on the throat. Total length 5.75 inches, culmen 0.6, wing 2.9, tail 2.1, tarsus 0.9. S. Afr. (Smith's Coll.).

Male and female, winter plumage. Similar to the last, but differing in the head and mantle being less shaded with yellow, an ill-defined buff eyebrow, and the under parts white, with a tinge of yellow on the lower throat.

The Tahatali Masked-Weaver inhabits Africa between about 12° and 26° S. lat.

The type, a female in breeding plumage, was discovered by Sir Andrew Smith between the Orange River and the Tropic, very possibly near Rustenburg, which is the most southern range yet positively known for the species. The full plumaged male has been figured under the name *Ploceus melanips* (Cab. J. f. O. 1884, pl. 3, fig. 2), and of late years the species has been, perhaps best, known as *H. shelleyi*, which was described from specimens collected by Sir John Kirk at Tete on the Zambesi.

Under the latter name Prof. Bocage has recorded the species from Benguela, and the type of *Ploceus finschi* came from Mossamedes. In the British Museum there are two males in breeding plumage from Ondongo and two females from Elephant Vley collected by Andersson, who writes: "The species is common in Damaraland and the parts adjacent; it is partial to the neighbourhood of water, where it nests, sometimes amongst reeds and at others on the extremities of the

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boughs of trees overhanging permanent or temporary waters, many nests being built on the same tree. The nest is firmly composed of strong grasses; the number of eggs is three; and the variation of the eggs in colour, shape and size is astonising." Mr. Fleck has also met with it in Damaraland.

It is not so surprising to find this species invading the dominion of *II. velatus* in the west when it, in like manner, shares the Transvaal district with *II. mariquensis*, and the habits of the three species appear to be alike, excepting, perhaps, that the present one is more partial to hanging its nests from the trees and *II. mariquensis* generally selects reed-beds for breeding purposes. In the British Museum there are five specimens of this species from Swaziland and the Limpopo River, collected by Buckley, and six males of *II. mariquensis* from Macamac, Potchefstroom, and probably other parts of the Transvaal.

Mr. T. Ayres writes: "The birds that frequent the mountainous parts of the Rustenburg district, where the country is wooded and warm, appear to me to be very much smaller, and also much brighter in plumage, as a rule, than those inhabiting the more open plains of the same district and other open parts of the Transvaal. Adapting their manners to circumstances, they hang their nests to low bushes and trees overhanging the streams, whereas in the open country their nests are usually placed between two reeds in the swamps or on the reed-banks of rivers, though even there the nests are occasionally to be found hanging from the outer twigs of trees. The eggs of the smaller race vary in colour just as those of the larger and less gaudy birds." He saw them commencing their nests in August before any of the males had assumed their bright nuptial dress, and by October 20, when he first found their eggs, they had attained their full breeding plumage. He also writes: "Not uncommon about the Inshlangeen, Mr. Jameson found them at Palatsie Pan in December, and subsequently I found a nest

with eggs on the banks of the Makara, a tributary of the Moloppo River, where their neatly constructed nests were hanging on the bushes fringing the stream."

T. E. Buckley saw a tree by the side of the Limpopo literally covered with their pendulous nests, in November. Mr. Guy Marshall found the species "fairly common round Salisbury, nesting among the granite kopjes at some distance from water."

Mr. Boyd Alexander during his expedition up the Zambesi found these birds breeding in considerable numbers at Zumbo, towards the end of December, and remarked that the females assume for the breeding season a bright yellow breast like the throat, and writes : "During our stay at Zumbo we had a good opportunity of observing the breeding habits of this Weaver. The males were continually at work building the nests, while the females were hardly ever seen near them, but were always abroad, each bird being in the company of another, so much so that they impressed us as being male and female till we procured specimens."

The most northern known range for this species in East Africa is Nyasaland, where it is apparently abundant, having been procured at Katunga, Mpimbi, Zomba and on the Dedza highlands in South Angoniland.

Hyphantornis tæniopterus.

Ploceus tæniopterus, Reichenb. Singv. p. 78, pl. 36, figs. 281, 282 (1863); Reichen. Vög. Afr. iii. p. 82 (1904).

Hyphantornis tæniopterus, Sharpe, Cat. B. M. xiii. p. 467 (1890) ; Shelley, B. Afr. I. No. 544 (1896).

Male in breeding plumage. Front half of the forehead, front half of face, the chin and throat black; erown and hinder half of face deep chestant in front, fading gradually into golden yellow on the nape and sides of neck; back of neck and the back nearly uniform greenish tinted yellow, with the rump bright golden yellow; tail dusky olive, with narrow yellow edges

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to the feathers; wing blackish brown, with pale edges to the feathers; these edges are dusky brown with a wash of yellow on the least coverts, golden yellow on the median and greater coverts and inner secondaries, and ashy yellow on the primary-coverts and remainder of the quills; under wing-coverts and inner edges of the quills yellowish white; sides of the lower half of the throat, breast, thighs and under tail-coverts bright golden yellow, tinted with chestnut on the fore breast and shading into a rich chestnut edging to the black of the throat. "Iris brownish red; bill black; feet reddish brown" (Heuglin). Total length 5-4 inches, culmen 0-7, wing 2-7, tail 1-8, tarsus 0-85. σ , 10. 7. 82, Bora (Emin).

Male in winter. Like the female.

Adult female. Upper parts ashy brown, with large blackish shaft-bands to the feathers of the mantle; tail-feathers with narrow yellowish outer edges; lesser wing-coverts like the mantle; median coverts with broad buff terminal margins, greater coverts and quills with olive buff edges, fading into white on the inner feathers; inner margins of quills and edge of bend of wing yellowish buff; under wing-coverts brownish buff; sides of head ashy brown; under parts white, shaded with brown across the crop and on the flanks. "Iris pale straw-colour; upper mandible dusky, lower one white, dusky along upper edges; tarsi and feet pinkish horn-colour." Wing 2-5. \mathfrak{P} , 5. 3. 01, Kaka (Hawker).

Reichenbach's Masked-Weaver inhabits the White Nile district between the Albert Nyanza and Khartoum, and eastward to Lake Stefanie.

Within its somewhat limited range the species is extremely abundant. Heuglin found them assembling in the cornfields by flocks, arriving from all sides, and after feeding passed away in uninterrupted clouds. Mr. Hawker procured specimens on his way up the Nile at Jebel Ahmed-Aghar, February 19; at Kawa, February 26; at Fashoda as late as April 6, and writes: "Reichenbach's Weaver-Finch goes about in enormous flocks, which appear to be kept continually on the move by Hawks, and prove a great nuisance to the naturalist. Nearly every bush seems to be full of them, and when they fly off they generally frighten every other species of small bird that happens to be near, thus making collecting very difficult. I never saw any individuals in breeding plumage, thongh I must have seen many millions."

Mr. A. L. Butler informs me that he saw them "in enormous flocks up the White Nile from February to April, literally millions. The flocks look like great wreaths of smoke in the distance and pass overhead with a rush like a hurrieane. Dr. Sukri Dib, Egyptian Army, collected, for me, two full plumaged specimens at Fashoda in August, where he found them extremely plentiful and breeding."

Capt. Dunn, while at the month of the Zeraf River, found the species acquiring the breeding plumage in May; Emin has collected specimens in the transition stage on May 6, and in full dress on July 10, so it is probable that the bright plumage lasts from the end of May to the end of December. In its more eastern range it has been found in the Magois country near lake Stefanie by Dr. Donaldson Smith, and at Sagantal by Erlanger.

Hyphantornis heuglini.

- Plocens heuglini, Reichen. Zool. Jahrb. 1886, p. 147 Gazelle R., Niger, Sassa, Lado; id, J. f. O. 1902, p. 36 Togo; id. Vög. Afr. iii. p. 84 (1904).
- Hyphantornis heuglini, Sharpe, Cat. B. M. xiii. p. 468 (1890); Shelley, B. Afr. I. No. 547 (1896).

Male in full plumage. Entire throat and sides of head black; remainder of head, sides of neck and the under parts golden yellow, with a chestnut shade towards the lower half of the black throat; the yellow of the crown commences at the nape to shade into the olive yellow of the back; mantle with very obscurely marked brown centres; tail yellowish brown, with narrow yellower outer edges to the feathers; wings blackish brown, with yellowish edges to the feathers; inner edges of quills and under wingcoverts ashy buff, the latter mottled with yellow, brightest along the bend of the wing. "Iris buffy white; bill black; tarsi and feet flesh-colour" (Forbes). Total length 5-5 inches, culmen 0.65, wing 2.8, tail 1.6, tarsus 0.85. d, 9. 85, Sassa (Bohndorff).

Adult female. Differs in the forehead, crown and back being ashy brown, with broad dark brown centres to the feathers of the mantle; sides of head pale brown, with an indistinct buff eyebrow; under parts buff, slightly washed with yellow on the cheeks and throat. Heuglin's Masked-Weaver inhabits West Africa, possibly from as far north as the Gambia River to the Niger, and ranges eastward into the Upper White Nile district.

The occurrence of this species from further west than Togoland rests on a specimen formerly in W. A. Forbes's collection and now in the British Museum, labelled "Gambia (Whiteley)." In Togoland Lieut. Zech procured a specimen at Kratchi. Forbes obtained one at Lokoja on the Niger, and Bohndorff one at Sassa in the Niam-Niam country. It is apparently a rare bird in the aforementioned countries, nor does it appear to be common anywhere. Emin procured a specimen at Kudurma, and Heuglin discovered the type near the Gazelle River. According to the latter naturalist it lives in pairs throughout the year, and suspends its oval nest, which is constructed of fresh grass, from the boughs of trees in the more open parts of the forest, and lays three or four eggs of a dusky green colour, which measure 0.84×0.58 . Emin also met with them in pairs and found their solitary nest suspended from grass-stalks in the open country interspersed with scattered trees.

Hyphantornis spekei. (Pl. 40, fig. 2.)

Hyphantornis spekei, Heugl. in Peterm. Mitth. 1861, p. 24 Somali; Sharpe, Cat. B. M. xiii. p. 469; Shelley, B. Afr. I. No. 546 (1896); Peel, Somaliland, p. 307 (1900); Grant and Reid, Ibis, 1901, p. 622 S. Abyssinia.

Ploceus spekei, Reichen, Vög. Afr. iii, p. 65 (1904).

Hyphantornis somalensis, Heugl. J. f. O. 1867, p. 379 Somali.

"Hyphantornis meloxit, Antin." Salvad. Ann. Mus. Genov. 1884, p. 188 Galla.

Male in breeding plumage. Forehead and crown golden yellow, shading into olive yellow on the back of the head and neck; back olive yellow, with angular dusky black centres to the feathers; lesser wing-coverts like the mantle; mediau coverts with broad yellow terminal edges; greater coverts and quills with yellowish margins, often inclining to buff on the greater coverts and inner secondaries; under wing-coverts and inner margins of



1.Hyphantornis nigriceps 2. " spekei.

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the quills ashy buff, the former mottled with yellow mostly at the edge of the pinion; tail yellowish brown, with narrow yellow outer edges to the feathers; sides of head and the throat black; sides of upper neck and the under parts golden yellow, with a chestnut shade next to the black throat. "Iris pale yellow; bill black; feet light brown." Total length 5.3 inches, cellmen 0.7, wing 3.25, tail 1.9, tarsus 0.95. σ , 6. 2. 97, Sogsoda Plain (E. L. Phillips).

Adult female. Forehead, crown, back of neck and the back ashy brown, with broad dark brown centres to the feathers of the mantle; wing and tail as in the male; an indistinct eyebrow and the under parts buff, with a slight shade of yellow on the throat and under tail-coverts; sides of head ashy brown. "Iris light brown; bill brown; legs pale brown." Wing 3:1. φ , 5. 11. 99, Athi River (Delamere).

Speke's Weaver inhabits Eastern Africa between 3° S. lat. and 11° N. lat.

The species was discovered in Somaliland by Speke who writes: "I found this little Baya-bird on the plateau in considerable numbers, feeding where there were long grasses and plants in flower." Mr. Pease also met with the species in open grass-country to the south of Adis Ababa, and Antinori procured the type of his *II. meloxit* in Gallaland.

Dr. Hinde found these Weavers abundant and breeding in colonies among the hills of Moa and Lemoyo and at Machako's. They will, he writes, "build a nest in about a day; but a pair will often build four or five before they get one sufficiently well bound to the branch to support its weight, and in consequence, where twenty or thirty of these birds are building in a single tree, the ground beneath the tree is strewn with nests in every stage of completeness. I have counted as many as 243 nests lying on the ground beneath a single tree." Antinori gives a very different description of their nesting habits in Shoa. Here the nests were not pendent nor flask-shaped, as with *H. vitellina* and *H. galbula*, but had their entire upper surface attached to the under side of a bough, so differed greatly in shape, which he calls "cake-like," although constructed of

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similar grass materials. During the first days in May the males appeared and, having selected a site, began constructing the nests, which in eight or ten days were roughly completed. The females then arrived and, after flirting and quarrelling with the males for two or three days, made them finish the decoration of the dwellings, they only contributing by laying the soft lining for the eggs to rest on. Unfortunately for these Weavers, they were at times ousted by the Sparrows (Passer diffusus), which often took possession of their nests.

The species is represented in the British Museum from Machako's (Hinde), Athi River, Nairobe, Lake Nakuru, Msara, Minisu (Delamere), Somali (Phillips), Guelan (Pease) and Shoa (Antinori). Among these specimens there are full plumaged males collected in February, March, April, September and November, and two males in immature plumage obtained in November and February. From this it would appear that the species has no special winter plumage, and that the males, once they have acquired the black and yellow plumage, retain their bright colouring throughout the year.

Mr. Jackson's collection contains specimens of this Weaver from the Nyando Valley close to Ntebbe, which is the most western range known for the species.

Hyphantornis spilonotus.

- Ploceus spilonotus, Vigors, P. Z. S. 1831, p. 92 (June) Algoa Bay; Smith, Ill. Zool. S. Af. Av. pl. 66, fig. 1 (1841); Reichen. Vög. Afr. iii. p. 64 (1904).
- Hyphantornis spilonotus, Sharpe, Cat. B. M. xiii. p. 468 (1890); Shelley, B. Afr. I. No. 545 (1896); Nehrkorn, Kat. Eiers. p. 131 (1899) egg ; Shortridge, Ibis, 1904, p. 175 Pondoland.

Ploceus stictonotus, Smith, S. Afr. Quart. Journ. 1831, p. 11 (Oct.) Eastern Cape Colony.

"Ploceus chrysostictos, Licht." Bp. Consp. i. p. 441 (1850).

Ploceus cyclospilus, Reichenb. Singv. p. 80, pl. 38, figs. 295, 296 (1863). Ploceus brandti, Reichenb. t. c. p. 82, pl. 40, fig. 306.

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Full plumaged male. Entire forehead and crown canary yellow of the same shade as the sides of the neck, the breast and under tail-coverts; hind neck and the mantle black, with broad terminal bright yellow edges to the feathers; lower back brownish ash, most of the upper tail-coverts black, both these parts mottled with some broad yellow ends to the feathers; tail and terminal tail-coverts olive brown with a wash of yellow; wings brownish black, with yellow edges to the feathers, these edges broadest and inclining to buff at the ends of the median and greater coverts; inner margins of the quills and the under coverts yellowish buff, the latter inclining to bright yellow at the edge of the wing, and mottled with dusky brown towards the primaries; sides of the head and the throat black, the black of the throat much compressed at the sides by the pale yellow of the neck, but extends, as an imperfect streak, down the centre of the chest. "Iris deep red; bill black; tarsi and feet flesh-colour '' (Stark). Total length 6·1 incep, sellmen 0·8, wing 3·45, tail 2·2, tarsus 0·95. J, 16. 10. 75, Pinetovn (T. L. Ayres). Winter plumage of both seres is alike. Forehead, crown and back

Winter plumage of both serves is alike. Forehead, crown and back of neck yellowish brown; mantle ashy brown with dark brown centres to the feathers; a pale yellow cyebrow; sides of head olive yellow, inclining to white in front of the eyes and passing into pale yellow on the cheeks and throat; breast and under tail-coverts white; bill flesh-colour, shading into dark brown on the upper mandible.

Female in breeding plumage. Differs from the last in the breast, thighs and under tail-coverts being mostly yellow and the bill almost black. Wing 3.15. 9, 16. 10. 75, Pinetown (T. L. Ayres).

The Natal Yellow-crowned Masked-Weaver is confined to South Africa, where it ranges from the Lake Ngami district into Eastern Cape Colony and Zululand, and eastward to the Mozambique coast.

All that we know regarding its north-western range is summed up by Andersson who writes: "I am not aware that this species is an inhabitant of either Damara- or Great Namaqualand; but I have received specimens from the Lake country."

The type was discovered inland of Algoa Bay, and described by Vigors in 1831. Sir Andrew Smith met with the species in about the same locality and redescribed it a few months later under the name of *Ploceus stictonotus*, and wrote: "Inhabits the eastern parts of the colony, particularly

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about the banks of the Reiskamma River, and upon the trees and bushes which skirt the edges of that beautiful stream it builds its pendulous nest." Ten years later he adds: "I have not seen nor heard of its having been found to the westward of Kafirland. Specimens are but rarely discovered, and these are generally found upon the margins of the rivers." Dr. Bowdler Sharpe, in his edition of "Layard's Birds of South Africa," writes: "We have received the species from Kuruman, and several have been shot at Outlands, close to Grahamstown."

According to Stark, "This species is probably the commonest Weaver-Bird in the lower districts of Natal and Zululand. Like (II. mariquensis) it is of a very social nature, remaining in flocks all the year round and breeds in colonies, often covering several adjacent trees with its nests. These resemble those of (*H. mariquensis*) in being kidney-shaped with an opening below, but as far as I have observed they are never built among reeds, but invariably suspended from the outer twigs of a tree or bush, and preferably over water. The nest is roughly woven out of long green grass-stems, and since the introduction of the Australian Blue Gum and Black Wattle into Natal, are invariably thickly lined with the long narrow leaves of these trees. Although the nests of this species are usually constructed without any projecting entrance neck, one is occasionally added, and in the Museum at Grahamstown is a nest ascribed to this bird with a neck about twelve feet long. When engaged in building these Weavers keep up an incessant chattering, and if undisturbed become extremely tame and familiar, especially the males, who take an active part in the labour by fetching the grass and helping in the weaving from the outside of the nest, to which they cling with their sharp claws, generally back downwards with expanded wings. The females remain inside and

assist by pulling one end of the grass through, then pushing it back again to the male. Many nests are abandoned before completion and others commenced, probably by the young beginners; other nests fall down from the twig to which they are attached giving way; so that the ground below the tree in which these Weaver-Birds are building is often covered with nests in all stages of construction." A somewhat similar remark is made by Dr. Hinde with regard to *II. spekei.*

"The eggs of the Spotted Weaver-Bird varies greatly in colour, almost as much so as those of *H. mariquensis*. They are white, blue, or green, frequently plain, but as often speckled and spotted with brown and reddish brown. They measure about 0.75×0.56 , and are usually three in number.

"These Weaver-Birds feed on grass-seeds and grain, as well as on insects, the nectar of aloes, the Australian 'bottlebrush,' and other flowering shrubs. The young are largely fed on soft insects, caterpillars, and various larvæ."

This species is very similar in size and colouring to *II. nigriceps*, with the exception of the top of the head, which is entirely bright yellow in full plumaged males.

Hyphantornis nigriceps. (Pl. 40, fig. 1.)

Hyphantornis nigriceps, Layard, B. S. Afr. p. 180 (1867) Kuruman;
 Sharpe, Cat. B. M. xiii. p. 456 (1890); Shelley B. Afr. I. No. 561 (1896); Nehrkorn, Kat. Eiers, p. 130 (1899) cgg.
 Ploceus nigriceps, Reichen. Vög. Afr. iii. p. 62 (1904).

Male in full plumage. Entire head and the throat black; remainder of the neck and the under parts bright golden yellow; in some specimens from Nyasaland the yellow of the hind neck encroached on the black of the crown, in others it is divided by a broad black parting mottled with yellow spots; back mottled black, with broad bright yellow ends to the feathers and ashy grey bases, the latter sometimes showing on the lower back; upper tailcoverts and tail olive brown washed with yellow; wings blackish brown, with yellow edges to the feathers; under wing-coverts and broad inner edges to the quills yellowish buff, the former mottled with dusky brown on the pinions; the black of the throat ends in a point on the crop, and the adjoining yellow is sometimes slightly tinged with chestnut. "Iris orange; bill black; feet horn-brown" (Stark). Total length 6 inches, culmen 0.8, wing 3.3, tail 2.0, tarsus 0.9. \Im , Zomba (A. Whyte).

Adult female. Differs in having no black on the plumage; forehead and crown of a yellower shade than the back, which is ashy brown with darker centres to the feathers of the mantle; eyebrows, sides of head and the throat yellow; under parts white, with a slight brownish shade on the crop and flanks. "Iris hazel; upper mandible light dusky brown, lower one pale yellowish; tarsi and feet pale brown." Wing $3\cdot4$. 2, 25, 9, 80, Umfuli River (Jameson).

Layard's Black-headed Weaver ranges from Benguela to Natal and over the whole of Eastern Africa to as far north as Somaliland.

The occurrence of the species in Benguela was made known by Anchieta who informs us that it is known there by the natives of Capangombe as the "Dicole," and at Caconda as the "Tiatala." Dr. Finsch has kindly informed me that there is a specimen in the Leyden Museum, procured by van der Kellen at Gambos. To the south of the Cunene River the species has not been recorded from further west than the Lake Ngami district and Kuruman. Andersson wrote: "I am not aware that this species is an inhabitant of either Damara- or Great Namaqualand; but I have received specimens from the Lake country." The type was discovered by the late Dr. Moffat at Kuruman, and the species has been recorded from Natal and Zululand; but is apparently scarce to the south of the Limpopo.

At the Umfuli River, in Mashonaland, Mr. Guy Marshall found these Weavers fairly common, in small flocks, searching the trees for insects. In this district Jameson and Ayres met with them breeding in colonies amongst the reeds, from the ends of which they suspend their nests. The eggs, according to Stark, are "white, blue, green, or cream-colour, sometimes plain, but often spotted all over with red or brown, or more sparingly marked with large blotches of reddish brown. They average 0.90×0.60 ." Along the Zambesi, according to Mr. Boyd Alexander, it is "the commonest of the Yellow Weavers, especially from Tete downwards, consorting with other Weavers and Finches on waste land near the river. They breed in large colonies, hanging their nests to the fish-cane that fringes the water's edge. Such a spot presents an animated appearance in the breeding season, these bright-coloured birds rushing backward and forward among the deep green reeds, intent upon their building operations, while the brown nests of the previous season present a notable contrast to those newly made, and are hardly distinguishable in colour from the reeds." Above the Victoria Falls Mr. Foa informs us that it is known to the natives as the "Tchete." Dr. Stuhlmann found it known at Quilimane as the "Gugumira," and Serpa Pinto as the "Esse" on Ibo Island.

These Weavers are generally distributed over Eastern Africa from the Zambesi to Somaliland, but are most abundant to the south of the Equator. They have been included in seven of the collections from Nyasalaud. Storms procured the species on the western side of Lake Tanganyika, and Böhm at Kakomo, Karema, the Luvule River, and along the banks of the Itambe Lake, where he found these birds in flocks frequenting the marshy ground and constantly uttering their shrill note as they assembled in colonies to construct their nests in the Acacia trees, about March. Fischer met with the species throughout the country from Bagamoio to Barawa on the Somali coast, breeding in colonies of 60 to 100 in all kinds of large trees, and remarked that the eggs varied greatly in colour. He also saw them feeding in large flocks in company with other Weavers and Sparrows. Mr. Jackson, who has collected specimens on Manda Island, at Tangani, Nairobe, Makarunga, Witu and Kibwesi, writes : "Very plentiful throughout the country. I have noticed that this Weaver builds its nest very much higher from the ground than most other Weavers. At Kibwesi there was a colony breeding in a tall acacia tree some 40 to 50 feet from the ground. I have also seen other colonies at Witu, on the coast, which have chosen the top of a tall cotton-wood tree for their nests, which were placed some 80 to 90 feet above the ground." It is curious that these Weavers should select for their breeding places high trees in East Africa and reeds in South Africa.

In Somaliland the species is apparently confined to the south-western corner, including Barawa and the Lower Juba River, in which latter district it has been procured by Erlanger, and by Jackson at Yonte.

Hyphantornis collaris.

- Plocens collaris, Vieill. N. Dict. xxxiv. p. 129 (1819) Congo, Angola; Reichen. Vög. Afr. iii. p. 61 (1904).
- Hyphantornis collaris, Sharpe, Cat. B. M. xiii. p. 455 (1890); Shelley,
 B. Afr. I. No. 560 (1896); Nehrkorn, Kat. Eiers. p. 130 (1899)
 egg.
- Hyphantornis cinctus, Cass. Pr. Philad. Ac. 1859, p. 133 Gaboon ; id. Jonrn. Philad. Acad. 1862, p. 184, pl. 23, fig. 2.

Adult male. Entire head, sides and front of the upper neck black, extending into a point on the lower throat; hind neck black, with rufous terminal edges to the feathers; mantle, scapulars, lesser and median wing-coverts black, with broad bright yellow edges to the feathers, middle and lower back more uniform yellow; a few of the under tail-coverts and the tail yellowish olive; remainder of the wings brownish black, with the edges of the greater coverts and inner secondaries bright yellow, and those of the other quills and primary-coverts narrower and more olive; nucle wings coverts and inner secondaries bright yellow; inder wing-coverts and inner secondaries bright yellow; nucle thigh and primary-coverts narrower and more olive; nucle wings coverts and inner margins of the quills pale yellow; breast, thighs and under tail-coverts golden yellow, rapidly shading into a broad rufons collar which extends over the crop and sides of the middle throat and completes the separation of the black of the head and throat from the remainder of the plumage. "I'ris red; bill black; feet flesh-colour" (Anchieta). Total length 6-2 inches, culmen 0.8, wing 3-36, tail 2-0, tarsus 1-0. σ , 30. 10. 68, Katumbella (Sala).

Female. Similar to that of H. cucullatus.

Vieillot's Collared-Weaver ranges from Gaboon into Benguela.

In the British Museum the species is represented by the following specimens: Gaboon (Skirehley); Landana, Malimba, Ungamungo (Petit); Congo (Sperling); Kattembella (Sala); Benguela (Monteiro).

Besides the above localities, the species has been procured by Marche and De Compiègne in the Ogowé district, by Du Chaillu at the Camma River, by Van der Kellen at Vista, and by Bohndorff at Leopoldsville on the Lower Congo. In Angola Major v. Mechow met with it at the Kambo and Kuanga tributaries of the Congo and at the Quanza River.

In habits they are very similar to the common West African Weaver, *H. cucullatus*. Falkenstein observed them during his stay at Chinchonxo in Loango, and remarked that they bred in colonies sometimes in company with *Melanopterye nigerrinus*, and for the construction of their nests stripped off the leaves of the palm trees into fibres to such an extent that they left only the stems of the leaves on some of the trees. The eggs, according to Dr. Reichenow, are bright bluish green freckled with rufous brown, and measure 0.96×0.6 .

Mr. Monteiro found the species to be not uncommon near the town of Benguela, and Anchieta also met with it in that district at Novo-Redondo. Vieillot, who first named the species, mentions as localities for it, Congo, Angola and Senegal; the latter is undoubtedly an error.

The adult males apparently retain their bright plumage throughout the year, but that has not yet been proved.

Hyphantornis cucullatus.

Oriolus cucullatus, P. L. S. Müll, S. N. Suppl. p. 87 (1776).

Hyphantornis cucullatus, Sharpe, Cat. B. M. xiii. p. 451 (1890); Shelley,
 B. Afr. I. No. 562 (1896); Nehrkorn, Kat. Eiers. p. 130 (1899)
 egg.

Ploceus cucullatus, Reichen, Vög. Afr. iii, p. 59 (1904). Oriolus textor, Gm. S. N. i, p. 390 (1788) Senegal.

Fringilla longirostris, Vieill. Enc. Méth. iii. p. 951 (1823).

Ploceus senegalensis, Steph. Gen. Zool. xiv. p. 34 (1826). Ploceus modestus, Hartl. Rev. Zool. 1845, p. 406 (\mathfrak{P}).

"Hyphantornis magnirostris, Verr." Hartl. Orn. W. Afr. p. 127 (1857, ?) Senegal.

Hyphantornis gambiensis, Heugl. Orn. N. O. Afr. p. 552 (1871).

Adult male. Head and upper throat jet black, the black extending beyond the ear-coverts and ending in a point on the lower throat, and is margined all round with dark rufous brown, which latter colour extends over the entire hind neck and upper half of the sides of the neck; back bright yellow, with a broad uniform black patch on each side from the base of the neck and meeting on the middle back; upper tail-coverts mostly yellowish olive like the tail, but the feathers of the latter have pale yellow inner margins; wings blackish, with broad yellow terminal edges to the coverts; the edges to the primary-coverts and quills more olive yellow, becoming bright yellow on the inner secondaries; under wing coverts and broad inner margins to the quills pale bright yellow; lower throat, breast, thighs and under tail-coverts bright golden yellow, with a slight rufous tinge on the front and sides of the breast and margined with deep rufous brown next to the black of the throat. Iris crimson; bill black; tarsi and feet flesh-Total length 6.2 inches, culmen 0.85, wing 3.5, tail 2.2, tarsus 1.0. colour. Niger (Heywood).

Adult female. Forehead, crown and upper tail-coverts olive yellow; back and sides of neck and the back ashy brown, with slightly darker brown centres to the feathers of the mantle; wings and tail similar to those of the full plumaged male but slightly paler; ear coverts shaded with olive; eyebrow, remainder of sides of head, chin, throat, breast, thighs, and under tail-coverts pale yellow, fading into white on the abdomen and flanks. Bill brown, fading into flesh-colour on the under half of the lower mandible. Wing 3.2. φ , 12. 12. 02, Fernando Po (Alexander).

The Western Black and Yellow-mantled Weaver inhabits West Africa from Senegambia to Gaboon.

The well-marked group to which this species belongs comprises two other nearly allied forms, as similar in habits as they are in their plumage. These are *H. bohudorffi*, ranging from Camaroons into Angola, and *H. abyssinicus*, the representative Weaver in North-east and Central Africa, ranging westward into the Northern Congo district.

The males assume their full plumage within the first twelve months and never lose it afterwards. They have a loud shrill note, are very active and gregarious, breeding in colonies and generally selecting for that purpose the large trees in towns or villages, apparently appreciating the protection thus afforded them against snakes and monkeys, which are no doubt their worst enemies during the breeding season. The nest is of a rounded form with a short side entrance passage hanging down, and is constructed of grass and shreds of the leaves generally of the Banana or Palm-tree, is carefully and solidly woven, and strongly attached to the twigs from which it hangs, and the lining of the nests, I examined at Cape Coast, consisted of soft dry grass and a few feathers. According to Dr. Büttikofer, the eggs are two or occasionally three in number, of a pale green colour sparsely freckled with brown, and measure 0.9×0.6 .

They show little fear of man, and are hardy, interesting cage-birds, weaving on to the bars of their cage any string, grass, or suitable materials they are supplied with, regardless of the season of the year. A male which I have now had in a cage for over twelve years I have fed upon seeds, but it will eat almost anything and is specially fond of grasshoppers, and will take all kinds of insect food.

Gordon (Contrib. Orn. 1849, p. 9) records thus a marvellous instance of the intelligence of "a similar species which is very common in India during the grain season, is occasionally taught tricks by the natives, such as loading and firing a small cannon, &c. I have myself witnessed a most extraordinary arrangement in the nest of this bird; on one side of the interior a piece of clay may be seen adherent to the nest; into this the bird, during the season of incubation, places a glowworm or fire-fly during the night."

In the British Museum there is a specimen from Rufisque

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(Laglaise). Near Bathurst Dr. P. Rendall found the species breeding in colonies, and Mr. Budgett calls it very common there during the rainy season. Fea records it as abundant on the Island of Bulama, and Mr. Kemp writes from Sierra Leone : "I met with these Weavers in April, May, June, August and September, at Bo, where they do great damage on the rice-farms. They commence building in August and continue building or patching up their nests throughout September and into October. The nesting colonies are invariably in the vicinity of towns, villages, or noisy places like a railway station. There are many hundreds of their nests, constructed out of the fibres stripped from banana leaves, built in the large trees at Bo, and although the birds are generally here in numbers, the bulk of them often go away for several consecutive days. They fly usually in parties of 20 to 50 from the large trees to some neighbouring rice clearing."

In Liberia Dr. Büttikofer found the present species and Cinnamopteryx castaneofusca to be the commonest of the Weavers, both frequenting the larger trees to breed in colonies. In the village of Robertsport he saw a combined company of these two species breeding in one tree, with their nests intermixed. They kept up a continuous, deafening chatter while constructing their nest, which took about a day to build. Often, as soon as one bird has brought some material and departed for more, a neighbour tears it away to use it for its own nest, which generally resulted in a free fight. These birds would also build in the less frequented parts of the forest, generally selecting the trees in which Gypohierax angolensis was breeding, for he remarked that, in the Cape Mount district, he rarely met with the eyrie of the Eagle without its being surrounded by a colony of nests of these noisy Weavers.

On the Gold Coast the species is equally abundant, and

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in February I saw them in numbers frequenting a large tree, full of their nests, in the centre of the market-place of Cape Town. Gordon found them breeding at Cape Coast in June. Mr. Boyd Alexander writes: "In the hinterland the bird again becomes common, the big boabab-trees around the native villages forming the centres of its nesting colonies. In May the colonies are full of activity—new nests are constructed close to those of the previous season, and the loud running chatter of the males may be heard as they court their mates at the entrance of their nests of basketwork, from which they hang, fanning their wings the whole time to and fro like birds with their feet caught in meshwort.

"In June the young males are similar in plumage to the adult female, but have the upper parts uniformly washed with olive yellow and the under parts with bright yellow; upper mandible brownish horn-colour. By the end of the year the feathers from the breast downwards become white, turning to earthy brown on the sides of the chest and flanks. The olive yellow wash also disappears from the brown feathers of the upper parts, with the exception of the crown, which still remains olive yellow. In the beginning of February a direct moult is undergone. The scapulars and rump are the first to assume the adult plumage, and the iris becomes red. By the end of March the bill has become entirely black; iris bright orange; feathers of the crown, sides of face, chin, and throat black; collar deep chestnut; mantle and back particoloured; remainder of the under parts splashed with bright orange-yellow; legs and feet light brown. About the middle of May the complete adult plumage has been assumed.

"I do not think that the adult male assumes a winter dress, since 1 have observed individuals throughout the year in the same plumage as that of the breeding season."

Drs. Reichenow and Lühder found both young birds and

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fresh eggs in August when they were at Accra and Abokobi. Ussher procured the species at the Volta River and remarks that these Weavers are very good eating. The species is apparently equally abundant and generally spread over the country eastward to the Niger. On the island of Fernando Po, Mr. Boyd Alexander informs us that it is "very common. Nesting in all the palm-trees round the native huts. Breeds in November."

In the British Museum there are the following adult males: one of Crossley's from Camaroons and one of Verreaux's from Gaboon; also two males of *H. bohndorffi* obtained by Mr. C. L. Bates at Efulen in Camaroons. I have not seen a male specimen of the true *H. cucullatus* from further south than Gaboon, which I therefore take as its boundary in this direction and believe that it is entirely replaced by *H. bohndorffi* in the Congo and Angola districts, this latter form being so extremely similar that it has not been generally recognised.

Hyphantornis bohndorffi.

Ploceus bohndorffi, Reichen. J. f. O. 1887, pp. 214, 307 Stanley Falls. Hyphantornis bohndorffi, Sharpe, Cat. B. M. xiii. p. 455 (1890); Shelley, B. Afr. I. No. 564 (1896).

Ploceus abyssinicus bohudorffi, Reichen. Vög. Afr. iii. p. 58 (1904).

Hyphantornis cucultatus (nec Müll.), Sharpe, Ibis, 1902, p. 96 Efulen.

Adult male. Similar to that of H. cucultatus, with the same amount of rufous brown on the sides of the neck, but differing in the brown of the neck extending forward on to the hinder crown and margins the entire hinder half of the black ear-coverts. Iris crimson; bill black; legs pale brown. Total length 6.8 inches, culmen 0.85, wing 3.45, tail 2.1, tarsus 1.1. \mathcal{J} , 8. 6. 01, Efuleu ($\bar{\mathbb{O}}$. L. Bates).

Adult female. Similar to that of H. cucullatus.

Bohndorff's Black and Yellow-mantled Weaver ranges from Camaroons into the Congo district and Angola.

In Camaroons, at Efulen, Mr. C. L. Bates procured in May

and June, 1901, two adult males and a female, and informs us that they were known to the natives as the "Nyas," a name which they would apply also to *H. cucullatus*, as the two species meet in this country and it requires very close inspection to distinguish them.

All the specimens I have seen from Tingasi and British East Africa belong to the nearly allied H, *abyssinicus*, so I doubt the present species having been procured in Central Africa eastward of 30° E. long.

The type of *H. bohndorffi* was discovered by Mr. Bohndorff at the Stanley Falls of the Congo River, and in the British Museum there are two specimens from Yambuya procured there by Jameson and Guy Burrows. That the species extends southward to Lake Tanganyika and into Angola is probable. Captain Storms's Tanganyika collection contained among the Weavers a female which has been referred to *H. abyssinicus* and another specimen to *H. cucullatus*. Henderson also procured a Weaver in Angola which has been referred by Hartlaub to *H. textor* (Gm.).

Hyphantornis abyssinicus.

Loxia abyssinica, Gm. S. N. i. p. 860 (1788).

Hyphantornis abyssinicus, Sharpe, Cat. B. M. xiii. p. 453 (1890);
 Shelley, B. Afr. I. No. 563 (1896); Nehrkorn, Kat. Eiers. p. 130 (1899) egg; Grant, Ibis, 1904, p. 259 S. Abyssinia.

Ploceus abyssinicus, Reichen. Vög. Afr. iii. p. 57 (1904).

Ploceus larvatus, Rüpp. N. Wirb. Vög. p. 91, pl. 32, fig. 1 (1835-40).

Ploceus flaviviridis, Rüpp. Syst. Uebers, pp. 69, 76, pl. 29 (1845).

"Ploceus solitarius, Württ." Heugl. J. f. O. 1867, p. 297 Fazoki.

Adult male. Similar to *H. cucullatus*, from which it differs only in the black of the top of the head not extending on to the nape and the sides and back of the neck being bright yellow. Hinder crown from above the middle of the ear-coverts and the nape yellowish chestnut; sides of neck up to the black of the head yellow, of no more rufous shade than the breast. Iris crimson; bill black; legs flesh-colour. Total length 6-9 inches, culmen 0-9, wing 3-5, tail 2-0, tarsus 1-0. \mathcal{J} , 16.6. 80, Lado (Emin).

HYPHANTORNIS GRANDIS

Adult female. Similar to that of *H. cucullatus*, but the lower throat, breast and under tail-coverts are buff. Tigré (Blanford).

The Abyssinian Black and Yellow-mantled Weaver ranges over the eastern half of Northern Tropical Africa.

This Weaver is similar in habits to *H. cucullatus* and differs slightly only in the colouring of the head and neck in the full plumaged males.

In its western range it is separated from H, cucullatus by the country between the lake district of Equatorial Africa and Camaroons and from H, bohudorffi by the watershed of the Nile and Congo. I have seen H, abyssinicus from as far west as Tingasi, and have never seen one of H, bohudorffi from east of 30° E. long.

The species is well represented in the British Museum by full plnmaged males from Lado, Kiri, Uganda, Omo River, the Mau Ravine, Shoa and Abyssinia. Mr. Jackson's collection contains many specimens, including adult males from as far west as Uganda and Butiaba on the Albert Nyanza, and Dr. Ansorge has obtained the species at Fort George on the Albert Edward Nyanza. I have no doubt but that all the other specimens of this group, procured in Central Equatorial Africa, by Emin Pasha, Dr. Ansorge and Mr. Oscar Neumann, belong to this species and not to *H. bohndorffi*, as Dr. Reichenow has already remarked.

The egg has been described by Heuglin as pale greenish blue, with a few violet brown spots most numerous at the thicker end, and measures 9.8×6.2 .

Hyhpantornis grandis.

Hyphantornis graudis, Gray, Gen. B. ii. p. 351 (1849) St. Thomas Isl.;
 Sharpe, Cat. B. M. xiii. p. 450 (1890); Shelley, B. Afr. I. No. 559 (1896); Bocage, Jorn. Lisb. 1904, p. 80 St. Thomas Isl.
 Ploceus grandis, Reichen. Vög. Afr. iii. p. 66 (1904).

Ploceus collaris (non Vieill.), Fraser, P. Z. S. 1842, p. 142 St. Thomas Isl.; id. Zool. Types, pl. 45 (1849).

Adult male. Head, chin and upper throat jet black; neck dark chestnut, which colour extends somewhat on to the nape; mantle yellowish olive, with indistinct blackish shaft-stripes and shading into fairly bright yellow on the lower back and upper tail-coverts; tail entirely yellowish olive; wings blackish brown, the lesser coverts and scapulars broadly edged with olive yellow; median coverts with broad yellow ends; greater coverts and inner secondaries with yellow edges; remainder of quills and the primary-coverts with more obscure olive yellow edges; inner margins of quills yellowish buff; under wing-coverts bright yellow like the breast, thighs and under tail-coverts; the rufous brown of the throat extending slightly on to the chest. Iris yellow; bill black; legs horny brown. Total length 8 inches, culmen 1.2, wing 4.4, tail 2.8, tarsus 1.3. $_{d}$, 10. 68, St. Thomas Isl. (Monteiro).

Adult female. Upper parts ashy olive, with blackish shaft-stripes and terminal edges to the feathers of the top of the head and back of neck, and broad dark centres to those of the mantle and scapulars; lower back, upper tail-coverts and tail uniform, the olive brightest on the edges of the feathers; wings as in the male, but the yellow is paler and nearly white on the undercoverts and bend of the wing; sides of head and neck brownish olive; under parts white, shaded with rust brown on the crop and sides of the throat; flanks duller brown; thighs with the hinder part dusky ash. Bill brown, fading into flesh-colour on the lower part of the undermandible. Wing 4:3. φ , 22. 10. 88, St. Thomas Isl. (F. Newton).

The Great Black-headed Weaver inhabits the Island of St. Thomas.

This handsome species, the largest of the Weaver-Birds, was first described by Fraser as *Ploceus collaris*, but that name having been previously give to another species by Vieillot in 1819, Gould renamed it *Hyphantonis grandis*. It is a very abundant bird on the Island of St. Thomas, to which it is apparently restricted, and is known there, according to Mr. F. Newton, as the "Camicella." In habits it closely resembles *H. cucullatus*, its common representative on the West African coast. An egg supposed to belong to this bird is remarkably small, it is described by Prof. Bocage as uniform yellowish white and measuring only 0.8×0.68 .

Hyphantornis weynsi.

Melanopteryx weynsi, Dubois, Orn. Monatsb. 1900, p. 69 Bumba. Ploceus weynsi, Reichen. Vög. Afr. iii. p. 56 (1904).

Adult male. Head, neck, back, scapulars and lesser wing-coverts black, in less perfect plumaged birds the rump and upper tail-coverts are mottled with dull yellow; tail yellowish dusky brown, with pale narrow inner margins to most of the feathers; remainder of wing-feathers black, with yellow edges, most sharply defined on the inner secondaries and greatercoverts and forming broad yellow ends to the median-coverts; under surface of quills dusky brown, with the inner edges bright yellow like the under wing-coverts and axillaries; breast, thighs and uuder tail-coverts bright yellow, with the sides of the breast deep chestnut. Iris red; bill black; feet brown. Total length 6-0 inches, culmen 0-7, wing 3-3, tail 2-0, tarsus 0-8. σ , 10. 3. 01, Ntebbe (Jackson).

Female. Upper parts olive; wing-coverts and scapulars black, edged with olive; greater coverts with yellow ends; tail-feathers dusky, edged with olive; throat yellowish; chest yellow, washed with olive; abdomen and under tail-coverts white; flanks ashy olive; under wing-coverts yellow. Bill and feet dusky. Wing 2.9. \mathfrak{P} , 10. 3. 01, Ntebbe (Jackson).

Weyns's Black-headed Weaver ranges from the Upper Congo into Uganda.

The types, male and female, were discovered by Commandant Weyns at Bumba on the Congo, in 22° 30' E. long. The species was originally referred to the genus *Melanopteryx*, but really belongs to *Hyphantornis*, as I have defined it. It has recently been procured by Mr. Jackson at Ntebbe in Uganda, where he collected two full plumaged males and two females, March 10, 1901.

Hyphantornis rubiginosus.

Ploceus rubiginosus, R
üpp. N. Wirb. V
ög. p. 93, pl. 33, fig. 1 (1835-40) Abyssinia ; Reichen. V
ög. Afr. iii. p. 55 (1904).

Cinnamopteryx rubiginosa, Sharpe, Cat. B. M. xiii. p. 473 (1890); Shelley, B. Afr. I. No. 566 (1896).

Hyphantornis castanosoma, Reichen. J. f. O. 1881, p. 334 Bardera.

Adult male. Head and upper throat jet black; neck, back, breast, thighs and under tail-coverts bright chestnut; scapulars chestnut, with black

shaft-bands; wings and tail brownish black, with pale edges to the feathers; these edges are mostly ashy brown ou the lesser-coverts, form broad chestnut ends to the median-coverts, broadish buff edges to the greater-coverts and inner secondaries, and duller narrower edges to the primary-coverts, quills and tail-feathers; inner margins of the quills and the under wiugcoverts white, the latter mottled with chestnut. "Iris red brown ; bill black ; legs dusky reddish " (Henglin). Total length 5 inches, culmen 0.7, wing 3.2, tail 2.1, tarsus 0.85. 3, 1. 10. 01, Harar (Zaphiro).

Adult female. Forehead, crown and back pale brown, with small dark centres to the feathers of the forehead and crown, mantle more boldly striped; wings and tail dark brown, with pale edges to the feathers; inner edges of the quills and the under wing-coverts buff; sides of head pale brown, with an eyebrow and the lower half of the cheeks buff; chin and throat buff; breast, thighs and under tail-coverts white; crop and flanks shaded with tawny buff. "Iris bright reddish brown; bill dusky black; legs pale horn blue." Total length 5.9 inches, culmen 0.7, wing 3.0, tail 2.0, tarsus 0.8. 9, 13. 7. 90, Njemps (Jackson).

Rüppell's Chestnut-Weaver ranges from Benguela and Ugogo into Abyssinia.

The most southern and western locality yet recorded for the species is the Katembella River in about 12° 30' S. lat., where, we are informed by Prof. Bocage (Jorn. Lisb. 1893, p. 13), that it has been obtained by Anchieta.

In Eastern Africa specimens have been collected at Konko, Igonda and Mdaburo (Böhm), Usambiro (Emin), Mombasa (Wakefield), Ndi (Hildebrandt), Tsavo River and in Taveta (Neumann), Lake Nakuro (Delamere), Mambrui and Barawa (Fischer), Bardera (Erlanger), Darar (Donaldson Smith), Harar (Zaphiro), and the type from Abyssinia (Rüppell).

Mr. Jackson, who found it at Gula-Gula, Kimani and Njemps, writes: "This bird is decidedly local, and I have met with it only in a very few places. At Njemps, near Lake Baringo, in July, 1890, I found it breeding in enormous number in the thorn-trees." From Sonthern Abyssinia Mr. Pease writes: "We were at Owaramulka in December, but did not see the Chestnut Weaver-Finch there till our return 28[March, 1905.

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in March, when we found it common among the tall trees." Rüppell discovered the species in the warm valley of Abyssinia, and Henglin, not meeting with it in that country, considered it to be migratory.

Hyphantornis badius.

Hyphantornis badius, Cass. Pr. Philad. Acad. 1850, p. 57 Fazokl; Sharpe, Cat. B. M. xiii. p. 460 (1890); Shelley, B. Afr. I. No. 558 (1896).

Ploceus badius, Reichen. Vög. Afr. iii. p. 67 (1904).

Ploceus rufocitrinus, Müll. Naum. 1851, pt. iv. p. 28 S. Nubia.

Ploceus mordoreus, Bp. Rev. et Mag. Zool. 1855, p. 76.

Textor castaneoauratus, Antin. Cat. p. 65 (1864) Blue Nile.

Hyphantornis axillaris, Heugl. J. f. O. 1867, p. 381.

Adult male. Head and throat black; remainder of neck and the crop chestnut; back bright yellow mottled with chestnut; tail olive brown, washed with yellow and with yellow edges to the feathers; wings blackish brown, the lesser wing-coverts with olive green edges, median and greater coverts edged with yellow, sometimes tinted with rufous; quills with duller yellow outer edges and their inner edges and under wing-coverts bright yellow; breast chestnut, fading into yellow on the under tail-coverts. Bill black; feet flesh-colour. Total length 5.5 inches, culmen 0.7, wing 2.9, tail 1.9, tarsus 0.9 (Heuglin).

Female. Differs in having the forehead and crown olive green; mantle blackish brown, with broad pale tawny yellowish brown edges to the feathers, and passing into uniform rufous on the lower back; eyebrows, sides of head, crop and flanks brownish yellow, fading into white on the throat and remainder of the under parts. Bill horny brown, paler beneath; feet pale brown (Reichenow).

Cassin's Masked-Weaver inhabits Abyssinia and the White Nile.

The type of the species was procured at Fazokl, on the Blue Nile, at which river Antinori found his type of *Ploceus castaneoauratus*, and the type of *Ploceus rufocitrinus*, Müll., came from Southern Nubia.

The range of the species is comparitively limited; Heuglin found it in large flocks along the White Nile in March and

April, when it was beginning to assume the breeding plumage, which was attained in May and the beginning of June, when he met with them at Sennar, on the Blue Nile, in the Taka district and along the Atbara. During the day they feed in pairs or small flocks on the grassy plains, retiring with noisy cries and a loud fluttering of the wings to roost in tall, thickly foliaged trees as the night approaches.

Hyphantornis jacksoni.

- Ploceus jacksoni, Shelley, Ibis, 1888, p. 293, pl. 7 Kilimanjaro ; Reichen. Vög. Afr. iii. p. 68 (1904).
- Hyphantornis jacksoni, Shelley, B. Afr. I. No. 557 (1896).
- Hyphantornis dimidiatus (non Salvad.), Sharpe, Cat. B. M. xiii. p. 459 (1890).

Ploceus dimidiatus, Reichen. Zool. Jahrb. 1886, p. 130, pl. 5, fig. 3.

Type, adult male. Head and neck black; entire back canary yellow; tail yellowish olive, with broad pale yellow inner edges to the feathers; scapulars like the back, but with blackish angular stripes on their outer webs; wings brownish black, with the lesser coverts mostly olive and the margins of the other feathers yellow, broadest and brightest on the ends of the median coverts and on the inner half of the wing; under wing-coverts and broad inner edges to the quills bright pale yellow. The black of the throat ends in a point on the crop; remainder of the front half of the throat, front and sides of the breast deep chestnut; centre of breast, thighs and under tail-coverts canary yellow, with a wash of rufous on the smaller tailcoverts. "Iris orange red; bill black; legs pale reddish brown." Total length 5.5 inches, culmen 0.6, wing 2.85, tail 1.9, tarsus 0.9. Kilimanjaro (Jackson).

Male, winter plumage. Differs in the upper parts being ashy brown, with a slight yellowish tinge, yellower on the rump and mottled with dark brown centres to the feathers; sides of head and the under parts buff, the breast slightly mottled with chestnut. With the exception of the brown mottling of the breast it probably resembles the full plumaged female, which is not known to me. Iris orange; bill and legs pale. $\vec{\sigma}$. 12. 1. 00, Lake Baringo (Delamere).

Jackson's Golden-backed Weaver ranges from the Albert Nyanza and Victoria Nyanza to the Indian Ocean.

The type was discovered by Mr. Jackson on Kilimanjaro,

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and he has since procured specimens at Butiaba on the Albert Nyanza, Ntebbi in Uganda, Elgeyo, Nandi and Lake Baringo. Mr. Oscar Neumann obtained several examples in Kavirondo in March. Fischer's collection contained two males from Arusha in March and four males and a female from Kagehi in November. I have seen full plumaged males, killed in March, July and November, so possibly they retain their bright plumage throughout the year, and that three specimens in moult procured by Mr. Jackson in January are immature birds; but as yet we have no notes from the field naturalists regarding this species. The eggs, probably like those of many of the allied species, vary considerably in colouring.

Hyphantornis dimidiatus.

Hyphantornis dimidiatus, Salvad. and Ant. Att. R. Ac. Torino, 1873, p. 360; id. Ann. Mus. Genov. 1873, p. 483, pl. 3 Kassala; Shelley, B. Afr. I. No. 556 (1896).

Ploceus dimidiatus, Reichen. Vög. Afr. iii. p. 69 (1904).

Ploceus fischeri, Reichen J. f. O. 1887, p. 69; id. Vög. Afr. iii. p. 70 (1904).

Hyphantornis fischeri, Sharpe, Cat. B. M. xiii. p. 458 (1890); Nehrkorn, Kat. Eiers. p. 130 (1899) egg.

Male in full plumage. Similar to H. capitalis in colouring, with the exception of the crop and breast being more strongly shaded with chestnut. It is also rather larger. "Iris brown; hill black; feet pale reddish brown." Total length 5.7 inches, culmen 0.7, wing 2.8, tail 1.9, tarsus 0.85. \mathcal{J} , 16.8.85, Wadelai (Emin).

Adult female. Differs in having no black on the plumage; forehead and erown olive-shaded brown; back ashy brown, with broad dark centres to the feathers of the mantle; an obscure yellowish buff eyebrow; sides of head and neck, throat, front and sides of breast, thighs and under tail-coverts buffy brown, fading iuto white towards the chin and centre of the breast. "Iris pearly; bill, upper mandible dusky brown, lower one paler; feet pale reddish brown." Wing 2.85. \mathfrak{P} , 14. 8. 85, Wadelai (Emin).

Antinori's Black-headed Weaver ranges over the Victoria Nyanza and Nile districts between 3° S. lat. and 16° N. lat.

The most southern range known to me for this species is Kagehi, at the southern end of Victoria Nyanza, where Fischer procured the types of *Ploceus fischeri* in November and December, and met with at the same locality II. jacksoni, which latter allied species is apparently more at home in the Masai district, while the present one belongs rather to the Nile region. Mr. Jackson's collection contains specimens from Butiaba on the Albert Nyanza. Dr. Ansorge found the species at the Albert Edward Nyanza and in Unyoro, and brought home thirteen of their eggs all out of one colony of nests. These are described by Mr. Hartert as very variable in colouring. "Some are bluish green, others bluish green with brown spots, or plain dark rufous brown, or plain brownish olive, almost like a nightingale's egg; or brown spotted with darker brown." They measure on an average 0.86×0.60 .

"These birds," according to Dr. Ansorge, "fed chiefly on the 'matama' (Kaffre corn). The males were noticed to be most vigorous nest-builders, selecting the extreme tip of a branch, on which they fastened the strips of grass they had brought in their beaks. The female occasionally came to inspect the work, and the male sometimes left its work unfinished and vigorously began another nest. The female occasionally took part in bringing some soft grass for the inner lining of the nest. When the nest was finished, the male most vigorously persecuted every other bird that ventured to alight on his chosen twig, but it never came to real fighting between them. In other species of *Hyphantornis* both sexes were observed to be equally busy in building."

In the British Museum there are fifteen specimens from Magungo in Unyoro and Wadelai, collected by Emin, who also procured the species at Agaru. From the wide tract of country between the latter place and Kassala it has not been

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recorded, unless to this species belongs the *Ploceus affinis*, Heuglin, which was never described. At Kassala, in one of the gardens of the town, the type was procured by Antinori's dragoman, Kohn, in September, 1871, and has been figured.

This is the eastern representative of *H. melanocephalus*; *H. capitalis* from the Niger district is an intermediate form, and both might be regarded as subspecies of *H. melanocephalus*.

Hyphantornis capitalis.

Tanagra capitalis, Lath. Ind. Orn. i. p. 432 (1790).

- Hyphantornis capitalis, Sharpe, Cat. B. M. xiii. p. 458 (1890); Shelley, B. Afr. I. No. 554 (1896).
- Ploceus capitalis, Shelley, Ibis, 1887, p. 34, pl. 2, fig. 1 ; Reichen. Vög. Afr. iii, p. 71 (1904).

Male in full plumage. Differs from that of *II. melanocephalus* only in being smaller and in having a shade of chestnut on the crop and down the centre of the breast; entire head and the throat black; remainder of the neck and the under parts golden yellow, washed with chestnut on the crop and, less so, down the centre of the breast; back yellow, with an olive shade on the mantle and upper tail-coverts; tail olive brown, washed with yellow at the edges of the feathers; wings blackish brown, with broad bright yellow edges to all the feathers excepting the lesser coverts, which are like the mautle; under wing-coverts and broad inner edges to the quills bright yellow. "Iris brown; bill black; feet flesh-colour." Total length 4.9 inches, culmen 0.6, wing 2.65, tail 1.8, tarsus 0.85. \mathcal{J} , 8.82, Abutschi (Forbes).

Adult female. Differs in having the forehead, crown, back and upper tail-coverts uniform yellowish olive; pale edges of the wing-feathers olive yellow and yellowish buff; eyebrows, sides of head, chin and throat pale yellow; breast and nucler tail-coverts white, with a slight ashy shade on the flanks and thighs. Wing 2.6. 9, 8.82, Abutschi (Forbes).

The Niger Black-headed Weaver inhabits Nigeria.

It is a small representative of *H. melanocephulus*. As far as I can ascertain, the occurrence of this species in Senegambia rests on its being mentioned by Hartlaub from that country on the authority of Lichtenstein, and from Casamanse

on that of Gujon. If these localities are correct, the specimens referred to probably belong to *II. melanorephalus.*

In the Niger district it has been obtained by Forbes at Abutschi and Shonga and by Mr. Hartert at Loko.

I likewise doubt its being a native of St. Thomas Island; but Prof. Barboza du Bocage refers to this species a specimen in the Lisbon Museum which was nominally obtained on that island in 1861 by Sig. Gomes Roberto, and apparently it is this identical specimen which Sousa has referred to *II. intermedius.* Were it indigenous to that island, one would expect it to have been met with there by Mr. F. Newton or Mr. L. Fea.

Since I wrote the above I find that Dr. Reichenow admits Senegal (Bullock) and Bulama Island (F. Newton) as evidence of its occurrence in the Senegambian district. It appears to me more probable that there is an error in these localities or in the determination of the names, than that the present species should occur in the same country as its extremely near ally and that neither should be known from the large tract of country between Senegambia and the Niger.

Hyphantornis melanocephalus.

- Loxia melanocephala, Linn. S. N. (x.) p. 175 (1858); (xii.) i. p. 305 (1766) *Guinea*.
- Hyphantornis melauocephalus, Sharpe, Cat. B. M. xiii. p. 457 (1890); Shelley, B. Afr. I. No. 553 (1896).
- Ploceus melanocephalus, Reichen. Vög. Afr. iii. p. 71 (1904).

Ploceus duboisi, Hartl. Bull. Mus. H. Nat. Belg. 1886, p. 144, pl. 4, fig. 1 Tanganyika.

Male in full plumage. Entire head and the throat black; remainder of the neck and the under parts bright canary yellow; back yellow; with an olive shade on the mautle and upper tail-coverts; tail olive brown, washed with olive on the edges of the feathers; wings blackish brown, with broad bright yellow edges to all the feathers excepting the lesser coverts, which are like the mantle; under wing-coverts and broad inner edges to the quills pale bright yellow. Total length 5:8 inches, culmen 0.65, wing 3.1, tail 2.1, tarsus 0.9. J, Gambia (Rendall).

Adult female. Very similar to that of H. capitalis, but slightly larger.

Male in winter plumage. Similar to the female, but with a wash of grey on the cheeks and the mantle of a rather more rufous shade. "Bill ashy grey, shading into slate-colour on the upper part; feet flesh-pink" (A. G. Butler).

The Gambia Black-headed Weaver inhabits Senegambia.

In the British Museum there are specimens from the Gambia River collected by Sir A. Maloney and Dr. P. Rendall. The latter naturalist writes: "This bird, which more frequently is to be seen than any other member of the family, prefers the lower branches of the mimosa, common in the marshy ground between the mangrove swamps; and though it also builds in colonies, I have seldom seen more than two nests on a single tree; they were usually about six or seven feet from the ground-level. Their eggs, which present every variation in colour between olive green and russet brown, are seldom in clutches of more than two, though once or twice I have taken three from a nest."

The species has also been procured at Casamanse and Galam; but in the Niger district it is apparently entirely replaced by *H. capitalis*.

The type of *Ploceus duboisi*, Hartl., which belongs to this species, formed part of Storms's Tanganyika collection, and I would suggest that the specimen may have been taken on board from the Senegambia coast, as I find no evidence for supposing the species to be a native of any other country.

Regarding the moult, Dr. A. G. Butler kindly informs me that he had a live specimen out of colour in 1898, which soon acquired the full breeding plumage and retained it uninterruptedly for six years, up to last winter, when it passed into the duller plumage resembling that of the female.



1.Xanthophilus temporalis. 2.Hyphantornis nyasæ

Hyphantornis nyasæ. (Pl. 40, fig. 1.)

Hyphantornis nyasæ, Shelley, Ibis, 1894, p. 20 Zomba, Milanji; id. B. Afr. I. No. 552 (1896).

Ploceus nyasæ, Reichen. Vög. Afr. iii. p. 72 (1904).

Ploceus fülleborni, Reichen. Orn. Monatsb. 1900, p. 99 Rupira.

Full plumaged male. Entire head black; neck all round golden yellow, the black of the chin not extending to the middle throat; hinder neck shading into the uniform olive yellow of the back, upper tail-coverts, tail, lesser wing-coverts and outer edges of the other wing-feathers; inner margin of quills yellowish buff; under wing-coverts pale yellow; breast, thighs and under tail-coverts yellow like the neck. Total length 6.6 inches, culmen 0.8, wing 3.1, tail 2.3, tarsus 0.9. \mathcal{J} , 8. 92, Milanji Plains (A. Whyte).

Male, winter plumage. Differing only in the absence of black on the head; forehead and crown olive and the chin and under parts yellow; bill brown, inclining to flesh-colour on the lower mandible. \mathcal{J} , Zomba, July (A. Whyte). The female, which I have not seen, is probably like this at all seasons and would closely resemble in plumage dull specimens of Xanthophilus xanthops, from which it would be most readily distinguished by its longer and more pointed bill.

The Nyasa Black-headed Weaver inhabits British Central Africa and Southern German East Africa.

It is represented in the British Museum by five specimens, four collected by Mr. Whyte, who discovered the types at Zomba and on the Milanji Plateau, and one by Mr. MacClounie in South Angoniland.

To the north of Lake Nyasa, in German East Africa, Dr. Fülleborn procured the type of *Ploceus fulleborni* at Rupira, and has also obtained the species at Songea.

Hyphantornis bertrandi.

Hyphantornis bertrandi, Shelley, Ibis, 1893, p. 23, pl. 2 Zomba, Milanji; id. B. Afr. I. No. 548 (1896).

Ploceus bertrandi, Reichen. Vog. Afr. iii. p. 77 (1904).

Adult male, type. Crown rufous shaded yellow, a crescent across the nape, sides of head and the upper half of the throat black, followed by golden yellow, which extends almost across the hind neck and separates the black nuchal patch from the ear-coverts; remainder of the upper parts uniform olive yellow, with slight indications of brown shafts to the feathers of the mantle; median and greater wing coverts and the quills dark brown, broadly edged with bright olive yellow; remainder of under parts rich golden yellow, with a very faint rufous shade on the middle of the throat; under wing-coverts, shafts and inner margins of the quills bright yellow. Bill black; tarsi, feet and claws pale brown. Total length 6.3 inches, culmen 0.86, wing 3.3, tail 2.6, tarsus 1.0. \neq , 7. 8. 91, Zomba (A. Whyte).

Adult female. Differing in having no black on the head nor yellow on the crown; forehead, crown, nape and ear-coverts olive, like the back; cheeks, chin and throat rather dull yellow, like the under parts, which are slightly shaded with olive on the sides of the crop and the flanks. Wing 3.3. Songwe (A. Whyte).

Bertrand's Masked-Weaver inhabits East Africa between the Zambesi and Zanzibar.

The species was discovered by Mr. Alexander Whyte at Zomba and on the Milanji plains, and named after Dr. P. L. Sclater's son, Bertrand Lutley Sclater, then Commander of the Police Force of British Central Africa, and who died a few years later in Ugando, much regretted by all who knew him.

This fine, well-marked Weaver has also been procured in the highlands, at the northern extremity of Lake Nyasa, and at Songea, by Dr. Fülleborn, and in the Ulugura country on the Upper Kingani River by Dr. Stulhmann.

Hyphantornis vitellinus.

Fringilla vitellina, Licht. Verz. Doubl. p. 23 (1823) Senegambia.

Hyphantornis vitellinus, Sharpe, Cat. B. M. xiii. p. 462 (1890); Shelley,
 B. Afr. I. No. 541 (1896); Nehrkorn, Kat. Eiers. p. 130 (1899) egg.

Ploceus vitellinus, Reichen. Vög. Afr. iii. p. 81 (1904).

Ploceus ruficeps, Swains. B. W. Afr. ii. p. 262 (1837) Gambia.

Ploceus sublarvatus, Müll. Naum. pt. iv. 1851, p. 28; Beitr. 1854, pl. 12. Xanthophilus sulphureus, Reichenb. Singv. p. 84, pl. 42, fig. 313 (1863),

2 Sennar.

"Ploceus flavomarginatus, Würt." Heugl. J. f. O. 1867, p. 299, 2.

Textor chrysopygus, Heugl. J. f. O. 1864, p. 246 Nubra.

Hyphantornis vitellinus uluensis, Neumann, J. f. O. 1900, p. 282 Ulu Mts.

Ploceus vitellinus uluensis, Reichen. Vog. Afr. iii. p. 82 (1904).

Adult male. Sides of forehead, sides of head, chin and upper throat black; remainder of the head and the under parts golden yellow, shading gradually into chestnut on the front of the crown, and the middle of the lower throat is slightly washed with that colour; back of neck and the mantle uniform olive yellow; lower back and upper tail-coverts golden yellow; tail olive brown washed with yellow, and with yellowish edges to the feathers; under wing-coverts and inner margins of the quills pale yellow. "Iris orange red; bill black; feet flesh-colour" (Jackson). Total length 5-5 inches, culmen 0-6, wing 2-8, tail 2-0, tarsus 0-8. Accra (Ussher).

Adult female. Differs from the full plumaged male in the forehead, crown and back being ashy brown, with broad dark brown centres to the feathers of the mantle and only a slight wash of yellow on the lower back and upper tail-coverts; lesser wing-coverts ashy brown; median and greater wing-coverts and the inner secondaries broadly edged with buff; under parts buff, slightly shaded with yellow on the checks and throat. Iris brown; bill brown; lower mandible whitish; feet brownish flesh-colour. Wing 2-6. \Im , 10. 2. 72, Accra (T. E. Buckley).

The Vitelline Masked-Weaver ranges from 18° N. lat. southward to the Ulu highlands, 2° S. lat.

Mr. Oscar Neumann has separated as a subspecies (*II. vitellinus uluensis*) his specimens from the Ulu Mountains and Nguruman; I have not seen the types, but it appears to me extremely improbable that they should differ from Mr. Jackson's series from Kamassia and Elgeyu and from Emin's from Wadelai, which all agree perfectly with specimens in the British Museum from Accra and Senegambia. The specimen with the least black on the forehead, I have seen, is labelled "Nubia (Verreaux)" in the British Museum.

The type of *H. vitellinus* came from Senegambia, and the species is represented from that country, by a full plumaged male in the British Museum and one from Gorée in the Lisbon Museum. It has not been recorded from Liberia, but on the Gold Coast it is fairly evenly distributed, at least towards the coast, where T. E. Buckley and myself met with it near Cape

HYPHANTORNIS VITELLINUS

Coast and at Accra. The Drs. Reichenow and Lühder found these Weavers breeding both at Accra and at Abokobi, with fresh eggs in the middle of August. The nests were hung from bushes at five to eight feet from the ground, one or more being suspended from the same bongh, but were not in large colonies. The nests were of the usual oval form, with the entrance-tube hanging down. The eggs, bluish white with pale reddish blue or violet markings, measure 0.8×0.6 .

The occurrence of the species in the Niger district is known to me only by a female specimen obtained by W. A. Forbes at Abutschi.

In North-east Africa Heuglin met with these birds in small flocks from May to July, at Berbera and up the White and Blue Niles. Their favourite resorts were small groups of acacia and other thorny trees in damp situations, on islands, and in the maize-fields. They were feeding on grain and insects, and their call-note was a shrill chirp. The males moult into their bright breeding plumage in June. The nest is woven out of fresh green grass and suspended from a twig at a height from the ground varying from three to twenty feet; many of these nests were empty and apparently used only as shelters for the males. The eggs vary greatly in colouring, from whitish to clay-colour or bluish green, some having only dusky bluish grey dots and freckles, while others are thickly spotted with reddish brown. He never found more than five eggs in a nest, and in their second brood there were generally only three. The eggs are figured in his work (Orn, N, O, Afr. pl. 47, figs. 8 to 12). When the young are able to fly they assemble in flocks in the open country and maize-fields and wander southward in November.

The Hon. N. C. Rothschild and Mr. Wollaston write: "The adult male is a very conspicuous bird, and his longdrawn, wheezy call-note might be heard about every fifty yards

in the thick scrub. Several of their hanging bottle-shaped nests were found, sometimes three or four depending from the same branch; one pair of birds was observed building at intervals for three or four weeks, but no eggs were laid during our stay at Shendi." This is the most northern range known to me for the species.

In Equatorial Africa specimens have been collected by Emin at Agaru and Wadelai; by Mr. Jackson at Kamassia, Ntebbi and Elgeyu; at the latter place they were breeding in small colonies in August.

Hyphantornis reichardi.

Ploceus reichardi, Reichen. Zool. Jahrb. 1886, p. 150, Karema; id. J. f. O. 1886, pl. 2, fig. 3; id. Vög. Afr. iii. p. 83 (1904).

Hyphantornis reichardi, Sharpe, Cat. B. M. xiii. p. 463 (1890); Shelley, B. Afr. I. No. 542 (1896).

Type. "Forehead, sides of head and the upper half of the throat black; erown rufous; back and sides of neck and the upper tail-coverts golden yellow; erop golden rufous; breast and under tail-coverts golden yellow washed with rufous; wings blackish brown, with broad yellow edges to the feathers; under wing-coverts and inner edges of the quills yellow; tail brown washed with olive yellow, and with yellow edges to the feathers. Iris orange yellow; bill black; feet brownish flesh-colour. Total length 5 inches, culmen 0.6, wing 2.7, tail 2.0 tarsus 0.8" (Reichenow).

Reichard's Vitelline Weaver ranges from Usegua to Lake Tanganyika.

The typical specimens were procured by Böhm at Simbamweni in Usegua and near Kerema on Lake Tanganyika, both places in about 7° S. lat. Storms also found the species on the western side of that lake. Böhm mentions (J. f. O. 1885, p. 70) meeting with a colony of these Weavers breeding on March 17; some of the nests contained young birds and others eggs, but he never saw more than two in a brood. The eggs he describes as of a bluish or greyish green shade, with spots or more confused marking of dusky brown, and measuring 0.8 \times 0.6.

BRACHYCOPE ANOMALA

Hyphantornis lineolatus.

Hyphantornis lineolatus, Sharpe, M. S. in Brit. Mus. Somali.

Type. Similar to *H. vitellinus*, but differing in the upper parts, from the nape to the end of the tail, being greener, and in having the mantle strongly streaked with black shaft-stripes to the feathers. "Iris red." Total length 5.4 inches, culmen 0.6, wing 2.8, tail 2.0, tarsus 0.8. \mathcal{J} , 28. 9. 94, Sheik Hassein (F. Gillett).

Male in imperfect plumage. Differs only in the olive extending forward through the middle of the crown and expanding over the whole forehead; sides of head, chin and upper throat mottled with black. 9, juv. 13. 12. 98, Hargeisa (Lovat).

Female. Very like that of *H. vitellinus*, but with a slightly more olive shade on the rump. Somaliland (J. J. Harrison).

The Striped Vitelline Weaver inhabits Somaliland.

I have described the only three specimens I have seen of this species. It probably entirely replaces *H. vitellinus* in Somaliland, so the specimen obtained by Dr. Donaldson Smith in the Darro Mountain should belong to this form.

Genus XIX. BRACHYCOPE.

Most nearly allied in general characters to *Hyphantornis*; but differs from all the other *Ploceinæ* in the comparatively short first primary, which does not quite reach to the end of the wing-coverts, and in the tail being very short, not more than half the length of the wing. Bill rather stout.

Brachycope, Reichen. J. f. O. 1900, p. 249 B. anomala.

Type.

The genus is represented by a single species from the Upper Cougo district.

Brachycope anomala.

Ploceus anomalus, Reichen. J. f. O. 1887, pp. 214, 307 Stanley Falls. Brachycope anomala, Reichen. Vög. Afr. iii. p. 97 (1904).

Male in full plumage. Upper parts brown, shading into yellow on the front half of the crown, brightest on the forehead, where there are a few

PACHYPHANTES

black marks; remainder of crown and back of neck pale brown slightly mottled with brownish black; mantle, wings and tail blackish brown, with rather narrow pale brown edges to the feathers; lower back and upper tail-coverts pale brown; under surface of quills dark brown, with the inner margins isabelline like the under wing-coverts; sides of head, chin and throat black, with the sides of the lower throat and the crop yellow; breast, thighs and under tail-coverts isabelline, with broad black ends to a few of the feathers on the front of the chest. Iris dark brown, hill black, feet pale brown. Total length about 4 inches, culmen 0.5, wing 2.4, tail 1.1, tarsus 0.8. 26.3.04, Jabbir (J. J. Harrison).

Female. Differs from the full plumaged male in having no yellow nor black on the plumage; forehead and crown pale brown; sides of head, chin, throat and crop isabelline like the entire under parts. Culmen 0.5, wing 12.15, tail 0.1, tarsus 0.8. Yambuya (Bonny).

The Anomalous Weaver inhabits the Upper Congo district.

The type, a male in imperfect plumage, was discovered by Bohndorff at Stanley Falls, on the Equator. In the Tring Museum there are three specimens, obtained by Bonny during the time he was stationed at Yambuya with the unlucky rearcolumn of the Stanley Expedition for the relief of Emin Pasha. These include a male and two in the plumage I here describe, as that of the female. Recently the British Museum has been presented with two, apparently fully adult males, by Mr. J. J. Harrison, who obtained them at Jabbir on the Bomikandi River, a northern tributary of the Congo, and this is all that is known regarding the species.

Genus XX. PACHYPHANTES.

Characterised by the very stout bill and in the throat being black in full plumaged birds of both sexes. It is similar to *Hyphantornis* in general structure, but is rather compactly built and resembles *Othyphantes* in the females having as much black on the head as in the males, in this case more, the crown being black in full plumaged females and yellow in the males.

Type.

Pachyphantes, Shelley, B. Afr. I. p. 36 (1896) P. superciliosus.

The genus, which includes only one known species, is confined to Western Tropical Africa.

Pachyphantes superciliosus.

Hyphantornis superciliosus, Shelley, Ibis, 1873, p. 140 W. Africa; Sharpe, Cat. B. M. xiii. p. 470, pl. 14 (1890).

Pachyphantes superciliosus, Shelley, B. Afr. I. No. 494 (1896).

Ploceus superciliosus, Reichen. J. f. O. 1902, p. 36 Togo; id. Vög. Afr. iii. p. 96 (1904).

Ploceus pachyrhynchus, Reichen. Orn. Monatsb. 1893, p. 29 Karevia.

Pachyphantes pachyrhynchus, Shelley, B. Afr. I. No. 495 (1896).

Adult male. Crown golden yellow, strongly shaded with chestnut on the forehead, and passing into yellowish olive on the nape; back of neck, back and upper tail-coverts yellowish olive, with brownish black centres to the feathers, most strongly marked on the mantle; tail and wings dark brown, with narrow pale edges to the feathers; under wing-coverts and inner edges of the quills sandy buff; sides of head, chin and middle throat black, the black ending in a point just in front of the crop, which is golden yellow, of a rather more tawny shade than the yellow of the sides of the upper neck and breast; abdomen, thighs and under tail-coverts sandy buff. "Iris brown; upper mandible horny black, lower one blue grey; legs brownish flesh-colour" (Forbes). Total length 5 inches, culmen 0.75, wing 2.5, tail 1-8, tarsus 0.8. Fantee (Sharpe Coll.).

Adult female. Differs in having the forehead and crown black, with a few olive yellow tips to the feathers; sides of forehead chestrut, passing into a broad golden yellow eyebrow; the yellow of the upper neck encroaches somewhat upon the ear-coverts. "Iris, bill and legs as in the male" (Forbes). Wing 2-5. West Africa (Brit. Mus.).

Male in winter. No yellow on the plumage. Upper parts sandy brown, shading into dull black on the crown; mantle striped, with blackish centres to the feathers; pale edges to the feathers of the wings and tail broader; sides of forehead and a broad eyebrow rufous buff, separated by a black band through the eye from the rufous buff of the cheek and ear-coverts, which colour spreads over the throat, sides of neck, body and the under tail-coverts, fading into white on the centre of the breast.

The Compact Weaver ranges from Liberia to the Congo and eastward into the Upper White Nile district.

In Northern Liberia Demery procured a male specimen in a cane jungle near Juring, while on his expedition up the

This is the only record 1 find of its Sulvmah River. occurrence north of the Gold Coast.

The types of the species are females, one in breeding, or summer, plumage, obtained somewhere in West Africa by Wilson Saunders, and the other beginning to pass out of the winter plumage, was procured for me by my late friend, John Smith, of Accra, in the beginning of March, 1872. The specimens sent to Ussher by Aubinn probably came from Denkera. Mr. Boyd Alexander writes: "Not by any means a common Weaver-Bird, but obtained at Pong." In Togoland specimens have been collected at Bismarkburg (Büthner) and at Sebbe (Baumann).

Falkenstein met with the species at Bonny, and Forbes obtained four specimens at Shonga from November 17 to December 1, which show that the species passes out of the summer plumage towards the end of December, and the Accra specimen indicates that the spring moult begins early in March.

The species has not been recorded from Camaroons nor Gaboon, but on the Loango coast it has been procured by Falkenstein and Petit, and on the Lower Congo, at Manyanga, by Bohndorff.

The type of *Ploceus pachyrhynchus* is a full plumaged male contained in Emin and Stuhlmann's collection from Kerevia in the Ukonju country near the Albert Edward Nyanza. Emin also procured a male in breeding plumage in April at Nyangabo, not far from Masindi in the Upper White Nile district, where it has likewise been found by Dr. Ansorge.

Genus XXI. OTHYPHANTES.

Very similar to Hyphantornis in structure and also in the colouring and pattern of the wings; but differing in the adults having the entire throat uniform bright yellow; females generally with more, never with less, black 29 (March, 1905,

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on the head than the males; plumage of the sexes sometimes alike, sometimes distinguished by the top of the head being black in the females and yellow, or partly so, in the males; lower back uniform brown, yellow or olive, contrasting generally very strongly with the mantle in both sexes, and in adults of both sexes the abdomen and under tail-coverts are alike, bright yellow or white.

Type.

Othyphantes, Shelley, B. Afr. I. p. 37 (1896). O. reichenowi. The genus is confined to Tropical Africa, and I have divided it into seven

species, but as two of these, *O. sharpei* and *O. lovati*, are known only by single specimens, they may prove to be varieties of the species to which they show close affinities.

KEY TO THE SPECIES.

a Abdomen vellow like the throat, breast and under

a. Abdomen yenow like the throat, breast and under	
tail-coverts.	
a ¹ . Lower back nniform yellowish olive.	
a^2 . Back of head black.	
a^3 . Mantle uniform black in adults.	
a ⁴ . Forehead yellow	reichenowi, 3. 4
b^4 . Forehead black, like the crown and sides	
of head.	
a ⁵ . Chin yellow	reichenowi, 2.
	nigrimentum. L
b^3 . Mantle olive yellow with dark centres to the	
feathers; top and sides of head black.	
e^4 . Hind neck and back blacker, the olive	
yellow of these parts more confined to	
the sides of the feathers	sharpei.
d^4 . Hind neck and mantle more olive, the	
feathers being entirely surrounded with	
olive yellow	stuhlmanni, 3, 9. 🔍 🚬
b^2 . Back of head ashy olive ; forehead and most of	
crown yellow; back olive yellow with dusky	
centres to the feathers of the mantle	lovati.
b^1 . Lower back ashy brown; back of head yellowish	
olive	baglafecht.
b. Abdomen and under tail-coverts white or brownish	
buff; lower back ashy brown.	
c ¹ . Throat and front of chest clear yellow.	united as a first
c^2 . Forehead yellow	emini, 3, ad.
<i>d</i> ² . Entire upper half of head black	
d^{1} . Throat and front of chest not yellow . Immature of the	last three species.
of the	cust miles spores.

OTHYPHANTES REICHENOWI

Othyphantes reichenowi.

Sycobrotus reichenowi, Fischer, J. f. O. 1884, p. 180 Great Arusha.

Othyphantes reichenowi, Shelley, B. Afr. I. No. 508 (1896).

Hyphantornis reichenowi, Sharpe, Cat. B. M. xiii. p. 418 (1890).

Ploceus reichenowi, Reichen. Vög. Afr. iii. p. 38, pl. , figs. 1, \mathcal{J} , 2, \mathcal{Q} . Adult male. Forehead, most of the crown, a band round the back of the ear-coverts, sides of upper neck, checks and entire under parts canary yellow, slightly tinged with chestnut near the forehead; back of head and neck and the mantle brownish black; remainder of back and the upper tailcoverts olive yellow; tail olive brown; wings brownish black, with rather dull yellow edges to the feathers; these edges are confined to the ends of the lesser and median coverts, the outer edges of the greater coverts and quills; under surface of wings, with broadish inner edges to the quills and the coverts yellowish buff, edge of pinion bright yellow; sides of head with a large patch of black extending back from the upper mandible and including the ear-coverts. "Iris pale yellow; bill black; legs pale brown." Total length 5.8 inches, culmen 0.7, wing 3.4, tail 2.4, tarsus 1.0. \mathcal{J} , 1.1.00, Lake Nakuro (Delamere).

Adult female. Differs in having the entire top and sides of the head black. Wing 3.1. 9, 29, 11, 99, Nairobe (Delamere).

Immature. Similar to the female, but differs in the black feathers of the upper parts being edged with yellowish olive. "Iris yellow; bill and legs brown." 3, 29. 11. 99, Nairobe (Delamere).

Reichenow's Weaver ranges over the eastern side of East Africa between 5° S. lat. and 1° N. lat.

The typical specimens were discovered by Fischer at Sigirari in Arusha and at Lake Naiwasha. Specimens have been collected by Sir Harry Johnston on Kilimanjaro, between 5,000 and 6,000 feet; by Dr. Hinde at Machako's and Ngong; by Mr. Neumann in Kavirondo, at Elmentata and Guassa Masai; by Dr. Ansorge at Nairobe in Kikuyu, and by Mr. Jackson on Mount Elgon, Lake Elmentata, Mau Ravine, in Nandi, at Toro, Elgeyu, and at Elmekita in Masailand. Many of these specimens are now in the British Museum, where there are also eleven others procured by Lord Delamere in the Kikuyu country and to the north of Mount Kenia.

According to Dr. Hinde they breed both in October and

OTHYPHANTES REICHENOWI

May. Mr. Jackson found them breeding at Nandi, July 6, 1896, and wrote: "Nest like that of the common Yellow Weaver-Bird, in a small tree like a mountain ash, about ten feet from the ground. Three eggs, white, with large rusty brown spots." He also writes from Nandi, May 24, 1898: "The nests vary in size, some being much more compact than others. They are made entirely of grass, mostly green, but it soon becomes dry. The ceiling is composed of green grassseed heads beautifully arranged, and the floor where the eggs rest is also lined with seed-heads, and very often with soft down of groundsel and thistles. Most of the eggs were very much incubated by the end of June, many of the nests containing young." Two days later he remarks : "Breeding. Nest with three blue eggs, no spots, much incubated; another with young. Nest woven on to the stem of a low tree or bush, not suspended to ends of twigs, made of coarse grass, lined with seed-heads, which form a roof and porch." At "Ravine, 7,500 feet, February 23, 1897. Very plentiful. Seen singly, and two or three together, sometimes as many as eight or ten; but this, I think, is only for a short time after the breedingseason." On May 30, 1898, he found a nest with two eggs, blue, with large brown spots.

Dr. Bowdler Sharpe makes the following comment upon Mr. Jackson's specimens: "Young birds are olive yellowish brown, with broad streaks of dark brown or black on the back; the crown uniform olive yellow, as also the sides of the face and neck, these being slightly darker; the entire under surface of the body is yellow, inclining to orange on the throat and chest. Such is the plumage of specimens procured in August. In March and July (when *fully adult* birds were also obtained) Mr. Jackson got some assuming a black head, but otherwise in the plumage of the young bird with the back streaked. Is it possible that there can be a striped winter dress for this Weaver-Bird?"

OTHYPHANTES NIGRIMENTUM

Othyphantes nigrimentum.

Ploceus nigrimentum, Reichen, Vög. Afr. iii, p. 39 (1904) Galanga.

Type. "Very similar to the female of O. reichenowi, but differs in having the chin black. Iris greenish yellow; bill black; feet reddish brown. Total length 6.8, culmen 0.72, wing 3.4, tail 2.2, tarsus 1.0. Galanga" (Reichenow).

The Black-chinned Weaver inhabits Benguela.

The type was discovered by Anchieta, who records its native name to be "Xiguengue," and I am not aware of a second specimen having been yet procured.

Othyphantes sharpei.

Otyphantes sharpii, Shelley, Ibis, 1898, p. 557 Nyasaland, Ploceus sharpei, Reichen, Vög, Afr. p. 39 (1904).

Type. Very similar to O. stuldmann, from which it differs in the greater amount of black on the hind neck and mantle. Upper surface entirely olive yellow and black; under surface entirely bright golden yellow; lores, cheeks, ear-coverts, top and back of the head jet black, the plumage gradually shading off into uniform olive yellow on the lower back, upper tail-coverts and tail; the feathers of the upper back, and all the wingcoverts and the quills black, broadly edged with olive yellow, becoming clearer yellow on the quills; under wing-coverts and inner margins of the quills yellow. Bill black; tarsi and feet pale brown. Total length 6:2 inches, culmen 0.7, wing 3:15, tarsus 0:95.

Sharpe's Weaver inhabits Nyasaland.

This form is known only by the type which was sent to the British Museum by Sir Alfred Sharpe from Nyasaland, and no locality or date was noted on the label. It is extremely nearly allied to *O. stuhlmanni*.

Othyphantes stuhlmanni.

Symplectes stuhlmanni, Reichen. Orn. Monatsb. 1893, p. 29 Wallua, Karevia, Bukoba.

Hyphanturgus stuhlmanni, Shelley, B. Afr. I. No. 522 (1896).

Ploceus stuhlmanni, Reichen. Vög. Afr. iii. p. 40, pl. , fig. 3, 3 (1904).

Adult male. Forehead, crown, nape and sides of the head jet black; remainder of the upper parts olive green, the mantle with sharply

defined black centres to the feathers, tail with yellower edges to the feathers; wings brownish black, with broad olive green edges to the lesser coverts and more yellowish olive edges to the other feathers; inner margins of the quills yellowish buff; under wing-coverts whitish yellow, shading into bright yellow along the edge of the wing; chin, throat, breast, thighs and under tail-coverts bright yellow, flanks and back of thighs washed with olive. "Iris yellow; bill black; feet flesh-colour." Total length 5-9 inches, culmen 0-7, wing 3-1, tail 1-4, tarsus 0-95. Ruwenzori (Jackson).

Adult female. Exactly like the male in plumage. Wing 3.0. 2, 19.3.9, Kampala (Jackson).

Stuhlmann's Weaver ranges from the Ruwenzori Mountains and Uganda to Lake Nyasa.

The type specimens were collected by Emin and Stuhlmann at Walia on the Albert Edward Nyanza, and at Karevia and Bukoba on the western side of the Victoria Nyanza. Dr. Ansorge has met with the species in Uganda, Toru and Unyoro.

Mr. Jackson's collection contains the full plumaged specimens I have described from the Ruwenzori Mountains, and from Kampala in Uganda, which confirm the statement already made, that the sexes are alike in colouring, and that the black crown is not a character of the female only, as is the case in its near ally *O. reichenowi*, of which the present species may be looked upon as the western representative form in Central Africa from Uganda to Lake Nyasa. The present species has been recorded from Ngomingi (Marwitz), Tandalla, and from Bulongwa in the Livingstone Mountains (Fülleborn), and it is possible that *O. sharpei* may represent a plumage of this species.

Othyphantes baglafecht.

Ploceus baglafecht, Vieill. N. Dict. xxxiv. p. 127 (1819); Reichen. Vög. Afr. iii. p. 40 (1904).

Othyphantes baglafecht, Shelley, B. Afr. I. No. 509 (1896).

Heterhyphantes baglafecht, Sharpe, Cat. B. M. xiii. p. 419 (1890); Grant, Ibis, 1904, p. 258 Harar, Hararmeyer, Adis Ababa, Godjam.

Ploceus melanotis (non Swains.), Guèr. Rev. Zool. p. 321 (1843).
Hyphantornisguerini, Lefr. in Ferr. and Gal. Voy. Abyss. iii. p. 229 (1845).
Ploceus melanops, Des Murs in Lefebvre's Voy. Abyss. p. 110 (1815-50).
Ploceus auricularis, Des Murs, t. c. Atlas, pl. 9, fig. 1.
Ploceus melanogenis, v. Müll. Naum. pt. iv. 1851, p. 28.
Ploceus leucopthalmus, Heugl. Syst. Uebers, p. 38 (1856) nom. nud.
Symplectes eremobins, Hartl. Zool. Jahrb. 1887, p. 321.

Male, breeding plumage. Forehead and crown golden yellow, of a slightly deeper shade in front; back of head and neck yellowish olive, like the mantle and upper tail-coverts; lower half of back ashy brown; tail olive brown with narrow yellower edges to the feathers; wings blackish brown with pale olive yellow edges to the feathers, confined to the ends of the lesser and median coverts, and the outer margins of the greater coverts and quills; inner margin of quills and the under wing-coverts sandy buff; edge of pinion bright yellow, like the entire under parts; sides of head jet black. "Iris yellowish grey; bill black; tarsi and feet flesh-colour." Total length 5 inches, enlmen 0.65; wing 3.0, tail 2.2, tarsus 0.9. \mathcal{J} , 29. 5. 68, Senafé (Blanford).

Female, *breeding plumage*. Differing from the last in having no yellow or black on the head; forehead and crown olive like the mantle; sides of head dusky olive.

Moulting. Under parts white mottled with yellow.

Winter plumage. Sexes alike. Upper parts ashy brown, with black shaft stripes to the feathers of the head and mantle, broadest on the latter part; upper tail-coverts slightly shaded with olive, tail feathers more so, especially on the outer webs; wings brownish black, with broad olive yellow edges to the feathers, inclining to buff on the inner secondaries; forehead, lores, cheeks and front of ear-coverts black, fading into ashy brown on the remainder of the head and sides of neck; chin, throat, breast, thighs and under tail-coverts isabelline buff. "Iris pale yellow; bill black; feet pale." Wing 3-1. 2, 5. 1. 99, Derrn (Lovat).

The Baglafecht Weaver ranges from the Upper White Nile and Southern Abyssinia into Bogosland.

Emin procured the type of *Symplectes eremobius* in the Upper White Nile district, where he found the species singly or in pairs frequenting the high grassy plateaus. Heuglin met with these Weavers as far north as Tsad-Amba, near Keren, and records them as very plentiful at Mensa, Adowa, Gonda, Begemeder, and in Wollo-Gallaland, inhabiting the highlands between 5,000 and 12,000 feet. It was generally

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observed singly or in pairs, but during the winter months assembled in small parties of five to ten in the trees and bushes. In September they were breeding in isolated nests, not in colonies, in large trees near water. The nest he describes as a large flask-shaped structure of green grass, and the eggs, two to four in number, are of a flesh-colour or pale bluish green with large spots and dots of rufous or purplish brown, and measure on an average 0.85×0.62 . The eggs have been figured (Heugl, Orn. N. O. Afr. pl. 47, figs. 6, 7). Dr. Blanford writes: "Common throughout the highlands, and seen at nearly 10,000 feet, though in general more common at a rather lower elevation. Specimens shot at the end of May had assumed the full breeding plumage." Antinori procured the species in June near Keren and in the upper part of the Anseba Valley, which is the most northern range known for these birds.

In Shoa, Antinori found the species in winter plumage in March and in full breeding plumage in August; those procured in May and June were passing out of the winter dress, and a specimen obtained in January was also in the transition stage. Count Salvadori remarks that this fine series of specimens from Shoa shows that the plumage of the sexes becomes different for the breeding season, especially in the colouring of their heads. The young have the upper parts ashy brown with blackish shaft-stripes and a slight olive tinge, under parts buffy brown.

Dr. Bowdler Sharpe, in his description of the winter plumage (Cat. B. M. xiii. p. 420), calls the "lower back and upper tail-coverts olive greenish." I have examined the seven specimens which were then in the British Museum, collected in January, March, May and July, and all have a well-marked clear, ashy brown lower back, in which character they differ from O. lovati.

In Southern Abyssinia Lord Lovat procured three specimens, January and March, in the winter plumage I have described, and on March 14 of the same year the full plumaged bird I have made the type of *O. locati*. A little further eastward Mr. Edward Degen has collected seven specimens between Harar and Adis Ababa in January, March and April, in various stages of plumage, but all with the lower back uniform ashy brown.

Othyphantes lovati.

Heteryphantes baglafecht, Grant, Ibis, 1900, p. 132, pt. Lekamte.

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Type, adult male. Similar to the male in breeding plumage of O. baglafceht, but differing in having the entire lower back yellowish olive like the upper tail-coverts; hinder crown and back of neck uniform ashy brown, slightly washed with olive. "Iris pale yellow; bill black; tarsi and feet light brown." Total length 6-3 inches, culmen 0.75, wing 3.2, tail 2.4, tarsus 0.95. σ , 16.3 99, Lakamte (Lovat).

Lovat's Weaver inhabits Southern Abyssinia and probably ranges into Somaliland.

The species is known to me by one apparently full plumaged male, the type discovered by Lord Lovat at Lekamte in Southern Abyssinia. Other specimens, which may belong to this species, have been collected by Lord Lovat at Derrn, Beroma and Jumjum, and by Mr. Pease at Harar, but as all these four specimens, three males and a female, are in winter plumage, they present none of the characters which distinguish the type of *O. locati* from the full plumaged male of *O. haglafecht*, and the characters for distinguishing these species may be confined to specimens in breeding plumage only.

This form may be only a variety, but I think it more probably represents a southern species or subspecies, for there is no shirking the fact that in the type of *O. locati* there is no

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trace of the brown on the lower back, which is a character 1 have met with in all the many specimens I have seen of the true O. baglafecht.

Othyphantes emini.

Sycobrotus emini, Hartl. Orn. Centralb. 1882, p. 92; id. J. f. O. 1882, pl. 1, figs. 1 3 9 Agaru.

Othyphantes emini, Shelley, B. Afr. I. No. 511 (1896).

Heterhyphantes emini, Sharpe, Cat. B. M. xiii. p. 420 (1890); Peel, Somaliland, p. 308 (1900) Sheik Mahomed.

Plocens emini, Reichen. Vög. Afr. iii. p. 39 (1904).

Sycobrotus zaphiroi, Grant, Bull. B. O. C. xiii. p. 22 (1902) Harar.

Male, breeding plumage. Forehead, most of crown, a band round the back of the ear-coverts, sides of upper neck, cheeks, throat and front of breast clear yellow, with a slight tinge of chestnut near the forehead, remainder of the head and neck and the mantle brownish black; lower half of back ashy brown; a few of the longest tail-coverts olive yellow, tail olive brown; wings brownish black with rather dull yellow edges to the feathers, confined to the ends of the lesser and median coverts and the outer edges of the greater coverts and quills; wing-lining with broadish inner edges to the quills and the coverts yellowish buff; edge of pinion bright yellow; lower half of breast, thighs and under tail-coverts buff. "Iris pale yellow; bill black; tarsi and feet pale reddish brown" (Emin). Total length 6 inches, culmen 0.75, wing 3.2, tail 2.4, tarsus 0.9. \mathcal{J} , Adis Ababa (Welby).

Female in breeding plumage. Differs in having the entire top and sides of head black. Wing 3.0. 3, 10. 6. 92, Harar (Zaphiro, type of Sycobrotus zaphiroi).

Emin's Weaver ranges from the Upper White Nile into Somaliland and Southern Abyssinia.

In the Upper White Nile district Emin discovered the type at Agaru, from whence there are specimens in the British Museum showing that the mottled plumage of the mantle, which is present up to April, is gradually discarded during the next two months for the uniform black of the nape and upper back which characterises the breeding plumage, and the type of Sycobrotus zaphiroi.

Specimens have also been procured by Emin at Buguera;

by Dr. Ansorge at Masindi; by Dr. Donaldson Smith at Fort Berkeley on the Victoria Nyanza, and at Sheik Mahomed in Somaliland. To the north east, at Harar, two adult females were obtained by Mr. Zaphiro, one, the type of *Sycobrotus zaphiroi*, being shot off its nest, which contained two eggs, July 10, 1892, and Capt. Welby has procured the species at Adis Ababa. It has also been obtained at Harar and in Arussi Gallaland by Erlanger.

Genus XXII. NELICURVIUS.

Resembles *Hyphantornis* and *Othyphantes* in general characters, and especially the latter in the chin and throat being entirely yellow in both sexes, which differ only in the colouring of the head being black in the males, and mostly yellow with some olive in the females. It is distinguished from all its allies by the breast being grey and the under tailcoverts chesturt.

Type. Nelicurvius, Bp. Consp. i. p. 439 (1850) N. nelicourvi.

The genus is represented by a single species, which is confined to the Island of Madagascar.

Nelicurvius nelicourvi.

Parus nelicourvi, Scop. Del. Faun. et Flor. Insub. p. 96 (1786).

Nelicurvius nelicourvi, Sharpe, Cat. B. M. xiii. p. 436 (1890) Madagascar; Shelley, B. Afr. I. No. 493 (1896); Nehrkorn, Kat. Eiers. p. 129 (1899) egg; Oberholser, Proc. U.S. Nat. Mus. xxii. p. 246 (1900) Madagascar.

Ploceus nelicourvi, Shelley, Ibis, 1887, p. 14.

Loxia pensilis, Gm. S. N. i. p. 860 (1788);

Ploceus pensilis, Milne, Edw. and Grand. Hist. Madag. Ois. p. 446, pls. 177a, fig. 2; 179, 180, 304, fig. 8 egg (1879); Sibree, Ibis, 1891, p. 441.

Male, *adult*. Top and sides of head black; upper neck, chin and throat bright yellow; remainder of neck and the upper parts olive green; tail blackish brown, with imperfect narrow olive margins to the feathers; quills blackish brown, with olive edges, broadest on the secondaries; under surface

of quills brownish black, with their inner edges whitish ash like the under wing-coverts; a shade of yellow along the bend of the wing; the olive green of the lower neck extending across the crop, separating the yellow throat from the dusky grey under surface of the body; under tail-coverts chestnut. Iris brown; bill black; tarsi and feet reddish brown. Total length 5:8 inches, culmen 0.7, wing 3:15, tail 2:25, tarsns 0:85. Saralalam (Crossley).

Female, *adult*. Differing in the colonring of the head only, which is yellow, with the back of it olive green, passing into black on the hinder half of the ear-coverts, and there is an olive black band through the eye. Wing 2.95. Nosi Vola (Crossley).

Immature. Differing from the last in the forehead, crown, back of neck and dark parts of sides of head being olive green like the back.

Nelicourv's Weaver is confined to the Island of Madagascar.

According to M. Grandidier, it inhabits the forests of the coast, especially those of the east and north-east of the island, where it is to be met with in fairly large flocks, and Pollen found them associating with Shrikes, such as *Artamia bicolor* and *Calicalicus*. They are active in their habits and noisy, especially in the mornings and evenings, and feed on seeds, berries and insects. Like most other Weavers, they roost in colonies; their nests, artistically constructed of blades of grass firmly woven and tied together, are described as of the form of a gourd with a long slender neck bent downwards forming the entrance passage. They are hung from slender, flexible bonghs, so that they sway with the slightest wind, and as many as thirty or forty may be counted on the same tree. The eggs, four or five in number, are pure green, and measure $0.8 \pm 0.088 \times 0.64$.

These birds are known to the natives as the "Fodisay," which means Inferior Finches.

XANTHOPHILUS

Genus XXIII. XANTHOPHILUS.

Similar to *Hyphantornis* and *Ploceus* in its general characters, but is distinguished from all the previously mentioned allied genera by neither sex having either a black band through the cye or the sides of the head black, and from *Ploceus* in the colouring of the breast and under tail-coverts being bright yellow or white. The sexes are often alike in plumage at all times of the year.

		Reichenb. henb. <i>l.c</i> .											Χ.	boyeri. subaureus.	
	genus species	confined	to	Tro	opica	l a	ud	So	uth	Af.	rica	',	and	comprises	

KEY TO THE SPECIES.

a. Bill proportionately longer and more slender.

a1	Larger;	wing not	less t	han 3	4 inches.
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a². Culmen straighter.

si

b.

a³. Bill slightly longer, culmen less curved, hinder part of crown olive like the back.

a^4 . Head and neck with no rutous shade	capensis.
b^{\pm} . Head and throat shaded with rufous	olivaceus.
b^3 . Bill slightly shorter; culmen more curved, entire	
crown yellow, contrasting sharply with the olive	
of the hind neck	temporalis.
b^2 . Culmen more curved; in males, crown and hind	
neck chestnut; in females, abdomen white	princeps.
^{b1} . Smaller; wing not more than 3 inches.	
c^2 . Back and more than half of the wings clear yellow;	
cheeks and throat brown	xanthopterus.
d^2 . Upper parts less yellow.	
c ³ . Yellow parts of a less orange shade; no black	
feathers in front of the eyes.	
c^{4} . Chin and throat brown \ldots \ldots \ldots	castanops.
d^* . Chiu and upper throat olive like the head and	
back	olivaceiceps.
d^3 . Head, neck and breast orange yellow, with a few	
black feathers in front of the eyes	aurantius
Bill stouter.	
¹ . Smaller; wing not more than 3 inches.	
c ² . Upper parts less yellow.	

e³. Entire head and neck chestnut dicrocephalus.

XANTHOPHILUS CAPENSIS

f^3 . Less chestnut on the head and neck.	
e ⁴ . Front of head above the gape deep chestnut .	galbula. 474
f^4 . Chestnut shade on head confined to the crown;	
nape and an ill-defined collar shaded with	
chestnut	castaneiceps. 🖞 🤅 💈
f^2 . Upper parts yellower; quite half of wings clear	
yellow.	
g^3 . Bill slightly stouter; top of head clearer yellow.	aureoflavus. 👇 🗸 🗧
h^3 . Bill slightly more compressed; an indistinct	
chestnut shaded band across the crop.	
g^{4} . Forehead and front of crown of a more chestnut	
shade	holoxanthus. 🖕 🍃 👳
h^4 . Head shaded with reddish orange	bojeri. $\neg P \circ$
d^1 . Larger; wing 3.2 to 3.6 inches.	
g^2 . Yellower; quite half of wing clear yellow.	subaureus. 4 8 2
h^2 . Less yellow; less than half of wings yellow	rauthone

Xanthophilus capensis.

Oriolus capensis, Linn. S. N. i. p. 163 (1766) Cape of Good Hope.

Xanthophilus capensis, Shelley, B. Afr. I. No. 530 (1896).

Ploceus capensis, Smith, Ill. Z. S. Afr. Av. pl. 66, fig. 2 (1841); Reichen. Vög. Afr. iii, p. 86 (1904).

Sitagra capensis, Sharpe, Cat. B. M. xiii. p. 430 Cape Col.; Nehrkorn, Kat. Eiers. p. 129 (1899) egg; Harris, Essays and Photographs, p. 105, pl. 25 (1901) nest.

Ploceus aurifrons, Temm. Pl. Col. iii. pls. 175, 176 (1823).

Ploceus icterocephalus, Swains. Class. B. i. p. 189 (1837).

"Fringilla chrysopis, Licht." Reichen. Z. Jahrb. 1886, p. 116.

Adult male. Upper parts olive yellow, passing into golden yellow on the crown and forehead; feathers of the manthe with obscurely marked dusky centres inclining to shaft-stripes; wings blackish brown, with broad olive yellow edges to the lesser coverts; the ends of the median coverts and the edges of the greater coverts and quills of a paler and yellower shade than the back; inner edges of quills and the under wing-coverts yellowish ash, with the edge of the pinion buff; remainder of the plumage golden yellow, with a dusky olive tinge on the sides of the head, and down the centre of the throat; sides of the erop and the flanks slightly shaded with olive. "Iris light red; bill black; tarsi and feet flesh-colour" (Stark). Total length 6-1 inches, culmen 0-9, wing 3:55, tail 2:4, tarsus 1:0. \mathcal{J} , 4.9.65, Cape Town (Andersson).

Adult female. Differs in having the upper half of the head, back of neck and the back ashy brown, with a faint olive yellow shade; wings and tail

slightly duller; remainder of plumage yellowish buff, shaded with ashy brown on the sides of the crop and the flanks. "Iris and bill brown" (Stark). Wing 3.25. 9, 3.9.74, Quatel Fontein (J. Butler).

The Cape Golden-Weaver inhabits Western Cape Colony, ranging northward to the Orange River and eastward to Algoa Bay.

"This large and robustly built species," Stark writes, "is very generally distributed, in flocks of from ten to fifty or sixty individuals, over Western Cape Colony, and although it shows a certain preference for the neighbourhood of vleis and marshy ground, it is also found in very arid localities at a considerable distance from the nearest water. Its flight is rather heavy and undulating. The Cape Weaver feeds to a considerable extent upon seed and grain, but at times upon insects. It is also fond of sipping the saccharine juice of the Cape aloe and of various proteas, and individuals may be sometimes met with their frontal feathers stained and matted together with the mingled nectar and pollen of these plants.

"They build their large kidney-shaped nests in colonies, frequently suspending them from the boughs of a tree overhanging water, but just as often over dry ground. If unmolested they prefer a tree standing close to a house as a nesting site. The nests are compactly woven with coarse grass or strips of reeds and sedge, the interior being warmly lined with fine grass-stems as well as the flowering tops. The entrance to the nest is from below, a narrow bar at the inner extremity dividing it from the interior, and preventing the eggs or young from falling out in windy weather. The eggs, four or five in number, are of a uniform deep blue. They measure 0.90×0.66 ."

Mr. Henry E. Harris, in his "Essays and Photographs," gives some interesting illustrations of this bird and its nest, and the following amusing account of its honeymoon : "I once

watched these birds building their nests, which they often begin in June or July. A commencement is made by the bird twisting long strands of grass round the end of some pendent twig, and making a loop of this grass about six inches in diameter, fastened again to the same twig; this is the foundation of the nest. The bird stands in this ring every time he returns to the nest with fresh material, and works from this position, pushing one end of the strand of grass through the ring, and then putting himself into all sorts of attitudes to enable him to catch hold of it from the other side, when he pulls it through, after the manner of sewing with a needle and cotton. The foundation for both portions of the nest are done in much the same way, several long ends of grass being left out at each side of the ring, and then fastened into the ring again, thus making loops which act as support for the bulb at either side of the nest; other strands are then woven on to this framework. The bird seems to bring a pest into a fair semblance of itself in about a couple of days, but after that it worked at it for a long time, patching it up and strengthening it. The male birds constructed the whole of the nests during the time that I watched them, and made a great fuss over the operation, bestowing praise loudly and unceasingly upon themselves as they hurried to and from the nests, of which there would often be ten or twenty in the same tree. These, when first woven, are green, but their colour soon changes after they have been hanging for a few days. When the nests are beginning to assume finished proportions, the birds go inside and do some work from the interior, or hang in a horizontal position from the opening of the nests and critically examine their work, holding their heads back the while, in much the same way as an artist would retire from a picture he was painting, to enable him to view it to better purpose. The female birds were placed in rather an awkward

position, they were evidently anxious to assist, but were on no conditions allowed to; they had to strike a mean; if they attempted to help they were immediately driven away, with two or three sharp tweaks on the head, to drive the lesson home, whereas if they sulked and went too far away, they were brought back in order that they might watch their industrious husbands.

"At sunset, when one would think there should be peace and harmony, there was more noise than ever. At this time the hen birds are allowed to go into the nests, but their husbands have no intention of leaving them alone. They fly up, clinging on to the circular opening that forms the entrance to the nest, making at the same time a continuous noise, something between a chatter and a squeak, and when by the alarming sound they have succeeded in ousting their wives from the nests, they chase them from branch to branch until they go back again. One bird that I saw was quite an actor: not satisfied with tormenting his wife in the legitimate way, he adopted a very ingenious method. After hanging on to the nest and making the most horrible noises, he pretended to be caught by one foot, and twisted slowly round and round, uttering at the same time a series of piercing screams, which gradually diminished as the poor thing was supposed to be at its last gasp; this brought the wife out in a great state, thinking that the end had come. No such thing, however, for no sooner was she out of the nest than the husband chased her back exultingly."

Xanthophilus olivaceus.

Icterus olivaceus, Hahn. Vög. aus Asien, &c., pt. vi. pl. 4 (1822). Xanthophilus olivaceus, Clarke, Ibis, 1904, p. 524 Ingogo. Ploceus capensis olivaceus, Reichen. Vög. Afr. iii. p. 87 (1904). Icterus caffer, Licht. Verz. Doubl. p. 19 (1823) Kaffraria. Sitagra caffra, Sharpe, Cat. B. M. xiii. p. 431 (1890). (March, 1905. 30

XANTHOPHILUS OLIVACEUS

Xanthophilus caffer, Shelley, B. Afr. I. No. 531 (1896).

Sitagra capensis caffra, Shortridge, Ibis, 1904, p. 176 Pondoland.

Adult male. Similar to X. capensis, from which it differs in having the head and throat tinged with chestnut shaded orange, and the breast slightly mottled with that colour. "Iris light straw-colour; bill black; legs light brown" (T. E. Buckley). Total length 69 inches, culmen 0.9, wing 3.6, tail 2.2, tarsus 1.0. \mathcal{J} , 28, 10, 81, Newcastle (E. A. Butler).

Adult female. Like that of X. capensis. Wing 3.2. 9, 28, 10, 81 (E. A. Butler).

The Eastern Cape Golden Weaver replaces X. capensis in Eastern Sonth Africa from Algoa Bay to the Zambesi.

Dr. Bowdler Sharpe, in his edition of Layard's Birds of South Africa, writes: "We have received specimens from Capt. Trevelyan at Kingwilliamstown, and Mr. Rickard has procured it at Port Elizabeth, and states that it is very plentiful at East London." The species is well represented in the British Museum from Natal and the Transvaal, where it is apparently abundant, and according to Dr. Holub it ranges to as far north as the Zambesi, but I find no other record of it from north of the Limpopo River. Their habits are, according to Stark: "Very like those of the larger *S. capensis*; the eastern race, however, appears to feed to much greater extent upon insects and the saccharine juice of various flowers. It pays constant visits to the conspicuous scarlet flowers of the 'Kaffir-boum,' and feeds side by side with various Sunbirds on the nectar."

"Its nest and eggs resemble those of the large Cape Weaver-Bird, the eggs being a trifle smaller; the nest is, however, frequently suspended between two reeds and is then built of strips of reed-leaves. When alarmed this Weaver utters a loud 'chur-r-r,' at ordinary times a cheerful chattering note."

The Cols. Butler and Feilden and Capt. Savile Reid, while in Natal, made the following notes: "About Newcastle they

were first noticed in number about the middle of October, when they at once proceeded to the construction of their nests. These we found in tall trees, on bushes overhanging steep krantzes, as well as in bushes and reeds by the river-side. Over thirty nests were counted on one tree. The male appears to do most of the building, but this may be only a supposition, arising from the much greater shyness of the female while an intruder is near. The first eggs were taken on October 29. How they can possibly remain in the nest when a gale of wind is blowing is quite a mystery, the entrance being so large and the depression inside the globular portion so little below it."

Xanthophilus temporalis. (Pl. 41, fig. 1.)

Hyphantornis temporalis, Boeage, Jorn. Lisb. 1880, p. 244 Caconda. Othyphantes temporalis, Shelley, B. Afr. I. No. 510 (1896). Heterhyphantes temporalis, Sharpe, Cat. B. M. xiii, p. 419 note (1890). Ploceus temporalis, Reichen, Vög. Afr. iii, p. 42 (1904).

Type, adult male. Forehead, entire crown, hinder part of ear-coverts, sides of upper neck and the under parts canary yellow; remainder of the neck, back, scapular and upper tail-coverts olive yellow, with brown centres to the feathers, rump slightly yellower; wings and tail dark brown, with pale edges inclining to buff towards the ends of the median and greater coverts and washed with yellow, most strongly so on the narrow pale edges of the quills and tail-feathers; under surface of the wings dark brown, paler towards the inner edges of the quills, and the greater portion of the under coverts buff, with a wash of yellow; lores, cheeks and greater portion of ear-coverts dusky olive, separated from the bright yellow of the crown by a very narrow black line in front of the eye; the yellow under parts incline to dusky whitish on the chin, and a few of the feathers down the centre of the lower throat have dusky black centres. Bill horny black; iris reddish brown; tarsi, feet and claws brownish flesh-colour. Total length 6-4 inches, culmen 0-7, wing 3-4, tail 2-1, tarsus 0-9. \mathcal{J} , 0. 79, Caconda (Anchieta).

Bocage's Golden Weaver inhabits Benguela.

The species is known by the type only, which was discovered at Caconda by Anchieta, and according to his notes on the label its native name is "Tailala," and its food seeds and insects.

XANTHOPHILUS PRINCEPS

Mr. Grönvold's illustration of this unique specimen, which he was enabled to make through the kindness of Prof. Bocage, will best show how it differs from its closest ally, X. capensis, in its much shorter bill, the culmen not so straight, the pale yellow of the crown extending on to the nape and forming a well-defined cap, and a narrow line of black separating the golden forehead from the lores. An adult male variety of X. capensis, obtained by Mr. Butler at Caledon, and formerly in my own collection, has nearly as much olive on the sides of the head as in X. temporalis.

Xanthophilus princeps. (Pl. 42, fig. 2.)

Symplectes princeps, Bp. Consp. i. p. 439 Prince's Isl.

Xanthophilus princeps, Shelley, B. Afr. I. No. 540 (1896).

Hyphantornis princeps, Sharpe, Cat. B. M. xiii. p. 449 (1890) Prince's Isl.

Ploceus princeps, Reichen. Vög. Afr. iii. p. 86 (1904).

Adult male. Head, neck and under parts mostly golden yellow; the forchead, crown, back and sides of the neck strongly washed with rufous; cheeks and crop more faintly shaded with that colour; back of lower neck and the back nearly uniform olive yellow, with a slight rusty shade on the upper tail-coverts; tail yellowish brown; wings blackish brown, with pale edges to the feathers, mostly olive yellow, but inclining to clear pale yellow on the ends of the median coverts, and the outer edges of the greater coverts and inner secondaries; under wing-coverts and the inner margins of the quills yellowish buff. "Iris bright yellow; bill black; feet flesh-colour" (Keulemans). Total length 7 inches, culmen 0.9, wing 3.4, tail 2.2, tarsus 1.0. \Im , Prince's Island (Dohrn).

Adult female. Differs in the absence of rulous on the head and neck, in the forehead and crown being olive yellow, and the abdomen, thighs and under tail-coverts white. "Iris pale greyish yellow; bill pale horn; feet flesh-colour" (Keulemans). Wing 3.2. \circ , Prince's Island (Dohrn).

The Prince's Island Golden Weaver is probably confined to Prince's Island.

My friend, Mr. Keulemans, the well-known artist, has kindly supplied me with the following interesting notes : "The



1 Nauthophilus helekanthus ? X princep

species is common in all parts of the island. It builds a most beautiful nest of split palm-leaves and grass, pear-shaped, with a side entrance at the lower portion. Usually it is carefully and firmly attached to the extreme end of a palm-leaf, and may be seen swinging in all directions without doing any harm to its structure or contents. The tail of the sitting bird is always visible from the outside of the nest, which the Monkeys often attempt to rob, but generally fail, owing to the flexibility of its support. These Weavers breed twice or three times in the year. The eggs, four or five in number, are pale blue. Native name 'Mello' or 'Melro,' probably derived from the Portuguese Amarella (yellow)."

The occurrence of this species as a native on the continent is doubtful. There is a specimen labelled "Lagos" which was obtained by Capt. Burton during his journey to Camaroons, when he would probably have visited Prince's Island. Another, nominally from Gaboon, was supposed by Verreaux to have been obtained by Du Chailhu. One in the Philadelphia Museum is labelled "Angola (Hamilton)," and one in Capt. Storms's collection as coming from Lake Tanganyika.

Xanthophilus xanthopterus.

Hyphantornis xanthopterus, Finsch and Hartl. Vög. O. Afr. p. 399 (1870) Shupanga; Sharpe, Cat. B. M. xiii. p. 444, pl. 13, fig. 2 head (1890).

Xanthophilus xanthopterus, Shelley, B. Afr. I. No. 529 (1896).

Ploceus xanthophilus, Reichen. Vög. Afr. iii. p. 94 (1904).

Hyphantornis castaneigula, Cab. J. f. O. 1884, p. 240, pl. 3, fig. 1 Zambesi ; Reichen, J. f. O. 1885, p. 374.

Ploceus castaneigula, Reichen. Vög. Afr. iii. p. 94 (1904).

Adult male. General plumage canary yellow, with the cheeks, chin, upper and middle throat chestnut; mantle slightly shaded with olive; least wing-coverts dusky olive, the other coverts are partly shaded with dusky brown, mostly so towards the primary coverts; this dusky shade is also present on the ends of the quills and the tail-feathers. "Iris dull orange brown; bill black; tarsi and feet dull pinkish biscuit colour" (Rendall). Total length 5.5 inches, culmen 0.65, wing 3.0, tail 2.0, tarsus 0.9. Type, Shupanga (Kirk).

"Young. General colour above mottled buffish brown, becoming nearly uniform on the rump and upper tail-coverts; feathers of the mantle and back with dark centres; wing-coverts brown, with pale yellow edges; quills brown, with broad yellow bases to the inner webs and the outer edges greenish yellow; tail-feathers greeuish brown, edged with olive yellow; crown of head and nape olive green, with narrow dusky centres; checks, sides of head, and the throat pale yellow; remainder of under parts white, with a pale buffish brown wash, more distinct on the breast and flanks : under tail-coverts yellow; upper mandible black, the lower one horn-colour; iris hazel; legs and feet brown."

"In the immature bird the quills and tail-feathers appear to be the first to assume the adult stage" (Alexander).

The Zambesi Brown-throated Weaver ranges from Nukana in about 19° 30′ S. lat., 22° E. long. into the Shiré district and Quilimane.

The most southern and western locality known to me for the species is Nukana in Central South Africa, to the northwest of Lake Ngami; here Mr. Fleck has procured the species. The type of Hyphantornis castaneigularis (figured J. f. O., 1884, pl. 3, fig. 1) is one of Dr. Holub's specimens from the Zambesi. Capt. Boyd Alexander obtained two immature males near the mouth of the Shirć, and along the valley of this river Mr. Percival found it very common in the Elephantmarsh to the north of Chicoma. Sir John Kirk discovered the type at Shupanga, and specimens have been collected by Mr. Whyte at Mpimbi, by Sir A. Sharpe in Angoniland, and Dr. P. Rendall procured a number of its eggs along the Upper Shiré. These eggs have been described by Mr. Hartert. They differ greatly, some being of a uniform pale brick colour or bluish green, others are variably marked, reddish white spotted all over with purplish brown, others bluish white with spots and blotches of rufous brown, and some are bluish green spotted with greyish brown.

Dr. Rendall preserved only one adult male, shot March 5, and also observed the species in June; at which of these dates he procured the eggs is not mentioned, nor whether they all came out of one colony of nests, and as some are compared to those of the Redstait, and others to the eggs of the Bulbul, one is led to suppose that they vary considerably in size, but no measurements are given; a pity, as the eggs of the species have not elsewhere been recorded.

At Quilimane Dr. Stühlmann found it known as the "Muganu."

Xanthophilus castanops.

Ploceus castanops, Shelley, P. Z. S. 1888, p. 35 Wadelai ; Reichen. Vög. Afr. iii, p. 96 (1904).

Xanthophilus castanops, Shelley, B. Afr. I. No. 528 (1896).

Hyphantoruis castanops, Sharpe, Cat. B. M. xiii. p. 443, pl. 13, fig. 1 head (1890).

Adult male. Forehead, cheeks, chin and middle throat chestnut; remainder of head, front half of neck and the entire under parts bright yellow; back half of neck, back and tail olive yellow, with a bright pale yellow band across the rump; wings blackish brown, with the pale outer edges of the feathers olive yellow on the lesser coverts and primaries, and yellower, as well as paler, on the other feathers; under wing-coverts and inner edges of the quills buffy yellow. "Iris pale yellow; bill black; feet reddish." Total length 5.8 inches, culmen 0.75, wing 2.8, tail 1.8, tarsus 0.95. d, 12. 8. 85, Wadelai (Emin).

Adult jemale. Differs in the forchead, crown, back of neck and the back being ashy brown, with large dark centres to the feathers of the mantle; sides of forehead and head uniform rufous buff: chin, front of neck and the breast duller brownish buff very slightly tinted with yellow, and fading into white on the centre of the abdomen. Bill black. Wing 2.5. 2, Ntebbe (Jackson).

Immature. Differs from the adult female only in having no rufous shade on the sides of the head, and in the bill being dusky horn-colour, with the under mandible whitish. 9, 12. 8. 85, Wadelai (Emin).

The Nile Brown-throated Weaver inhabits the Victoria Nyanza and Upper White Nile district.

Emin, who discovered the species at Wadelai, also procured

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specimens on Uliambiri Island off the south-west coast of Victoria Nyanza, and it was apparently abundant at both of these extreme limits of its known range, for he records it as common at the latter place, and at Wadelai he collected the five typical adult specimens all labelled male, and an evidently immature bird, which I have described, is labelled female.

The full plumage is probably attained for their first breeding season, and is subject to no seasonal change, judging from Dr. Ansorge's specimens obtained in Toru in April, and by Jackson's collection, which contains a male and female from Kama Island, August, and two males and four females shot at Ntebbe, March and August. The females and immature birds may easily be mistaken for hens of *Hyphantornis spekei*, but the bill is more slender.

Xanthophilus olivaceiceps.

Symplectes olivaceiceps, Reichen. Orn. Monatsb. 1899, p. 7 Songea. Ploceus olivaceiceps, Reichen. Vög. Afr. iii, p. 50, pl. fig. 2 (1904).

Type. Head and upper parts yellowish olive; upper tail-coverts yellower; wings and tail ashy brown, with olive edges to the feathers; under wing coverts ashy white washed with yellow; throat brownish olive; crop golden brown; remainder of the under parts yellow. Bill black; feet brownish flesh-colour. Total length 5^o6 inches, culmen 0^o65, wing 3^o2, tail 1^o7, tarsus 0^o8.

The Olive-headed Golden Weaver inhabits the Upper Rovuma district.

The species was discovered by Dr. F. Fülleborn at Songea, near the source of the Rovuma River, and is known to me only by the description and figure of the type.

Xanthophilus aurantius.

Malimbus aurantius, Vieill. Ois. Chant. p. 73, pl. 44 (1805) Congo.
Xanthophilus aurantius, Shelley, B. Afr. I. No. 527 (1896).
Hyphantornis aurantius, Sharpe, Cat. B. M. xiii. p. 444, pl. 13, fig. 3 (1890); Nehrkoru, Kat. Eiers. p. 129 (1899) egg.

Ploceus aurantius, Reichen. Vög. Afr. iii, p. 49 (1904).

"Hyphantornis royrei, Verr." Hartl. J. f. O. 1865, p. 97 Gaboon.

Adults. Head and entire underparts deep golden yellow with a slight chestnut tinge, strongest on the throat; eyelids and a few feathers in front of the eyes black; back of neck, back and tail yellowish olive, with the rump deep yellow; wings blackish brown, with the edges to the feathers yellow tinted with olive, most strongly so on the lesser coverts, primary-coverts and primaries; inner edges of the quills and the under wing-coverts yellow. "Iris orange brown; bill black; feet flesh-colour" (Forbes). Total length 5 inches, culmen 0.6, wing 2.7, tail 1.6, tarsus 0.75. \Im , Landana (Lucan).

Immature. "Upper parts uniform olive green, with darker centres to the feathers; edges of secondaries and wing-coverts olive yellow; chin, throat and eyebrow, edges of wings and the under wing-coverts yellow; chest, abdomen and under tail-coverts pale grey, inclining to white on the centre of the breast, abdomen and under tail-coverts. Bill flesh-colour. November 25, Liberia" (Büttikofer).

The Orange Weaver ranges from Liberia to the Congo and eastward into Uganda.

The species is apparently abundant in Liberia, for Demary obtained it at the Sulymah River, and Dr. Büttikofer collected specimens at Robertsport and Grand Cape Monut, and remarks that they frequented the sea-shore, the small islands and banks of the rivers, and were breeding in November in widely spread colonies of twelve to twenty nests, never clustered together on a single tree. The nests were hung at 4 to 8 feet from the ground or over the water, and were of a somewhat kidneyshape, measuring 5 inches by 4.5, with the opening beneath, were strongly woven and firmly fastened to the bough from which they hung. The eggs, generally three in a nest, were pale green, spotted with violet and brown, and measured 0.6×0.5 .

Dr. Ansorge has obtained the species in the Lower Niger district, and there are specimens in the British Museum from Bonny (Crossley), and Abutschi (W. A. Forbes), otherwise it has not been recorded from the West Coast between Liberia and Gaboon. The type of *Hyphantornis royrei* was in the

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Bremen Museum with that name, and the locality, Gaboon, written on the label by Jules Verreaux, and was probably obtained by Du Chaillu. The species has also been met with by Marche and De Compiègne at Lopé and the Ogowé River-Lucan and Petit both procured specimens at Landana. Perrein discovered the type at the Congo, and the species has been obtained at Stanley Falls (Bonhdorff). Emin found them breeding in April in the grass along the banks of the Ituri River, and Mr. Jackson's collection contains specimens from Ntebbe in Uganda.

Xanthophilus dicrocephalus.

Hyphantornis dicrocephala, Salvad. Ann. Mus. Gen. 1896, p. 45 Somali. Ploceus dicrocephalus, Reichen. Vög. Afr. iii. p. 83 (1904). Ploceus orphnocephalus, Erlanger, Orn. Monatsb. 1903, p. 23 S. Somali.

Adult. Head and neck chestnut, inclining to black on the crown; back and tail yellowish olive, the latter with yellower edges to the feathers; wings blackish brown, with olive yellow edges to the feathers; under wingcoverts and inner margins to the basal portion of the quills pale yellow; breast and under tail-coverts pale yellow, with a more orange shade on the chest. Bill black; tarsi and feet flesh-colour. Total length 6 inches, culmen 0-55, wing 3-0, tail 2-0, tarsus 0-8.

The Chestnut-headed Golden Weaver inhabits Somaliland.

The species was discovered by Prince Ruspoli in Somaliland, but the exact locality is not known. A second specimen, the type of H. orphnocephalus, Erlanger, has been procured by Mr. Garre Levin, May 1, 1901, at Duma Duma in South Somaliland, between the Dau and Juba Rivers, and this is all that is known to me regarding the species.

Xanthophilus galbula.

Ploceus galbula, Rüpp, N. Wirb. Vög. p. 92, pl. 32, fig. 2 (1835-40); Reichen. Vög. Afr. iii. p. 95 (1904).

Xanthophilus galbula, Shelley, B. Afr. I. No. 532 (1896).

Hyphantornis galbula, Sharpe, Cat. B. M. xiii. p. 442 (1890); Nehrkorn, Kat. Eiers. p. 129 (1899) egg; Grant, Ibis, 1904, p. 259 S. Abyssinia. Adult male. Forehead, cheeks and chin chestnut, shading into bright yellow on the remainder of the head, front half of neck and the underparts generally; eyelids and a few feathers in front of the eye black; hinder half of the neck, the back and tail olive yellow, slightly yellower on the rump; feathers of the mantle with obscurely marked dusky shaft-bands; wings blackish brown, with olive shaded yellow outer edges; inner margins of the quills and the under wing-coverts bright pale yellow. "Iris orange; bill black; legs brown" (Pease). Total length 5 inches, culmen 0-6, wing 2.8, tail 2.0, tarsus 0.85. \mathcal{J} , 23.7.68, Anseba R. (Blanford).

Adult female. Differs in having the upper half of the head, hind neck and back ashy brown, with dark centres to the feathers of the mantle; upper tail-coverts slightly washed with yellow; wings browner than in the males, the quills alone having yellowish edges. Under parts brownish, fading into white towards the centre of the abdomen, and a faint shade of yellow on the throat. Iris dark brown; bill pale brown; whitish towards the base of the lower mandible; legs, feet and claws pale fleshy horn-colour." Wing 2.5 inches. 2, 6.7.68, Ain (Blanford).

Rüppell's Golden Weaver inhabits North-east Africa between 5° and 19° N. lat. and ranges into Arabia.

The species is apparently abundant throughout its range. It has been procured in Somaliland by Dr. Donaldson Smith, Mr. Elliot, Mr. C. V. A. Peel, and by Mr. Lort Phillips, who writes: "These bright little Yellow Weaver-Birds and their hanging pear-shaped nests are to be found at every wateringplace, well, or stream throughout the country, from the Berbera gardens to the top of Wagga Mountain. The nests we examined in the third week of March all contained young."

In Shoa specimens have been collected by Antinori and Ragazzi at all seasons of the year, and in Southern Abyssinia by Lord Lovat, Mr. Harrison and Mr. Pease.

Dr. Blanford writes: "Abundant on the shores of Annesley Bay, in the passes up to about 4,000 feet, and in the Anseba valley. In the latter locality it breeds in August; at the commencement of the month the nests were all built, but no eggs were laid. The nest is of grass, as usual shaped like a pear, with an opening at the side without any long tubular entrance, and is often hung on acacia trees." The eggs measure on an average 0.85×0.65 ; and are very variable in colour, being white, rosy, pale green, or blue, and spotted and freekled with reddish brown, violet, or black. Five varieties have been figured by Heuglin (Orn. N. O. Afr. pl. 42, figs. 13-17).

According to Heuglin, the species ranges northward to 19° N. lat., and is abundant in the Samhar and Bogos districts from the sea-shore up to 6,000 feet.

On the White Nile, "These Weavers," Mr. Witherby writes, "very, very common and to be found in every stretch of wooded or bushy country. They were generally in small flocks, and often with *Passer latens*. They have a wheezing little song, sounding more like the creaking and squeaking of two small boughs rubbing together, than the voice of a bird."

Mr. A. L. Butler found the species "swarming in the gardens at Gedaref in April, May and June, 1901; huge flocks were met with between this place and Gallabat. On May 25, several nests were commenced in a half-hearted way, though at this date the birds were only just beginning to assume their breeding plumage. I should say they breed in full swing during the rains of July and August in the Kassala district."

Xanthophilus castaneiceps.

Hyphantornis castaneiceps, Sharpe, Cat. B. M. xiii. p. 448, pl. 13, fig. 5 (1890) Taveta.

Xanthophilus castaneiceps, Shelley, B. Afr. I. No. 534 (1896).

Plocens schillingsi, Reichen. Orn. Monatsb. 1902, p. 158 Rufu R.; Reichen. Vög. Afr. iii. p. 93, pl. , fig. 3 (1904).

Ploceus aureoflavus (non Smith), Shelley, P. Z. S. 1889, p. 367 Taveta.

Adult. Head, neck and underparts golden yellow, with the forehead and crown deeper chrome yellow, the hinder half with chestnut ends to the feathers, from whence extends a narrow band of chestnut shaded feathers across the sides of the neck and widening out into an ill-defined collar on the lower throat; remainder of the hind neck, entire back and edges to the wing and tail-feathers deep yellow, of an olive brown shade, excepting on

the rump; under wing-coverts and inner margins of the quills pale yellow. "Iris orange ; bill black ; feet pale brown." Total length 6 inches, culmen 0.6, wing 3.0, tail 2.3, tarsus 0.9. 9, 99, Rufu River (Schillings).

Type (probably a female). Differing from the above in the forehead and crown being more evenly washed with chestnut; cheeks, chin and throat golden vellow, with a slight shade of chestnut on the sides and base of the throat; portion of lower mandible pale. Wing 2.9. Useri River (Hunter).

Immature. The olive of the back extends forward over the top of the head, where it is shaded with orange and inclining to form an orange yellow eyebrow; cheeks slightly shaded with chestnut; chin and throat bright golden vellow. Wing 2.9. Useri River (Hunter).

The Rufous-crowned Golden Weaver ranges from the Rufu River into the Teita country.

The type of *Plocens schillingsi* was obtained by Mr. Schillings at the Rufu River.

The species was discovered by Mr. H. C. Hunter at the Useri River in the Teita country, where he collected two examples, which are now in the British Museum. I have described the only three specimens I have yet seen as they appear to me to be, adult, male and female, and a young bird, and probably represent all the varieties of plumage to which the species is subject.

Xanthophilus aureoflavus.

Ploceus aureoflavus, Smith, 111. Zool. S. Afr. Av. text to pl. 30, fig. 1 (1839) W. Africa; Reichen, Vög. Afr. iii, p. 91 (1904 pt.). Xanthophilus aureoflavus, Shelley, B. Afr. I. No. 533 (1896).

Hyphantornis aureoflavus, Sharpe, Cat. B. M. xiii. p. 446, pl. 13, fig. 4 (1890); Nehrkorn, Kat. Eiers. p. 129 (1899) egy.

"Hyphantornis aurea, Natt." (non Less.) Hartl. J. f. O. 1860, p. 180 Zanzibar.

Hyphantornis sulfureus, Reichenb. Singv. p. 84, pl. 42, fig. 313 (1863).

Hyphantornis concolor, Heugl. J. f. O. 1867, p. 389 Nubia.

Adult male. General plumage canary yellow, very slightly tinted with chestnut on the head and throat; an obsolete olive shade on the mantle; portions only of the wings and tail-feathers dusky, which colour, on the under surface of the wings, is confined to the end portions of the quills.

XANTHOPHILUS AUREOFLAVUS

"Iris orange yellow; bill black; feet flesh-colour" (Emin). Total length 5-3 inches, culmen 0.65, wing 3-0, tail 2-0, tarsns 0.85. Pangani R. (Kirk). Immalure. Differs in having the forehead, crown and mantle olive yellow, mottled with pale brown feathers which have dusky shaft-stripes; wing-feathers mostly dark brown with yellow outer and inner margins; a yellow eyebrow; ear-coverts olive yellow; cheek, chin and throat pale yellow; remainder of the underparts white mottled with yellow. Malinda (Kirk).

The Mnana Golden Weaver ranges from the Rovuma River to Formosa Bay.

This, the commonest Weaver on Zanzibar Island, is well known there as the "Mnana." The type of the species is in the British Museum and was wrongly supposed by Sir Andrew Smith to have been a native of Sierra Leone; it is also probable that Dr. Peters's specimen from "Mozambique" and Rüppell's, from "Nubia," really came from the Island of Zanzibar, or from the neighbouring coast, as the species is only positively known to inhabit a small portion of East Africa. The most southern locality yet recorded for it is Mtiras on the Rovuma, where it has been procured by Dr. Fülleborn, otherwise I do not find it mentioned from much further south than Zanzibar Island, but is most abundant there, and apparently generally distributed along the coast to as far north as Formosa Bay, not extending further inland than 35° E. long. According to Fischer, the nest is a small oval structure, with no long entrance tube, is composed of green grass and generally suspended from the under side of a cocoanut palm leaf. The eggs, three to four in number, are uniform pale blue, and measure on an average 0.86×0.58 . He found them commencing their nests in the early part of May, and by the end of August there were only a few breeding pairs left, but towards the end of November they started a second breeding season.

The name, Hyphantornis aurea, given to this species by

XANTHOPHILUS HOLOXANTHUS

Hartlaub in 1860, was suggested by his finding it written by Natterer on the labels of some specimens of this Weaver procured by Boger on Zanzibar Island, Natterer probably believing them to be identical with *Nanthophilus galbula*, which had received the name *Plocens aureus* by Des Murs, in 1845. The type of *Hyphantornis concolor*, Heugl., is a specimen from Rüppell's collection, labelled "Nubia," now in the Leyden Museum, and as Dr. Finsch has kindly informed me that it belongs to this species, the locality written on the label cannot be correct.

Xanthophilus holoxanthus. (Pl. 42, fig. 1.)

Ploceus holoxanthus, Hartl. Abhandl. nat. Ver. Brem. 1891, p. 22 Mtoni; Reichen, Vög. D. O. Afr. p. 181 (1894) Mtoni.

Xanthophilus holoxanthus, Shelley, B. Afr. I. No. 535 (1896).

Ploceus aureoflavus, Reichen. Vög. Afr. p. 91 (1904 pt.).

Adult male. Similar to X. aurcoflavus, but differing in the slightly smaller bill and in the head being strongly washed with chestnut on the forehead and crown. "Iris dark brown; bill black; feet pale." Total length 5 inches, culmen 0.65, wing 2.6, tail 1.7, tarsns 0.85. Mtoni (Bohndorff).

Adult female. Forehead, crown and back of neck yellowish brown; back pale brown with dark centres to the feathers of the mantle; upper tail-coverts and tail yellowish brown, the feathers of the latter with yellow edges; wings blackish brown with pale yellowish edges to the feathers and the least coverts yellowish brown; quills with broad bright pale yellow inner edges; under wing-coverts buff, slightly washed with yellow; a yellowish white eyebrow; underparts white washed with pale yellow on the crop, cheeks and sides of neck; shaded with olive on the ear-coverts and with isabelline on the flanks and under tail-coverts. Upper mandible dark brown, lower one flesh-colour. Wing 2:35. Mtoni (Bohndorff).

Bohndorff's Golden Weaver inhabits the Zanzibar Coast.

Mr. Bohndorff discovered the type of the species at Mtoni, on the Kingani River, in March, 1890, when he procured several other specimens, two males and two females of which are now in the British Museum, but I am not aware of its having been since met with.

XANTHOPHILUS BOJERI

This bird is so very like X. aureoflarus that Dr. Reichenow refers it, with doubt, to that species. I have had one of Bohndorff's typical specimens figured in order that it may be more readily compared with that form. It appears to me possible that it may be the southern representative of X. aureoflarus, in which case the specimen from Mtiras (Fülleborn) should belong to this species and not to X. aureoflarus.

Xanthophilus bojeri.

Hyphantornis bojeri, Finsch and Hartl. Cab. Decken's Reis. iii. p. 32 (1869); Oust. Bibl. Ecole Hantes Etudes, xxx. Art. 10, p. 11 (1886) Somali ; Sharpe, Cat. B. M. xiii. p. 448, pl. 13, fig. 6, head (1890); Nehrkorn, Kat. Eiers. p. 130 (1899) egg.

Xanthophilus bojeri, Shelley, B. Afr. I. No. 536 (1896).

Ploceus bojeri, Reichen. Vög. Afr. iii. p. 92 (1904).

Xanthophilus aureoflavus (non-Smith), Reichenb. Singv. p. 84, pl. 42, fig. 312 (1863) Zanzibar.

Adult male. Similar to X. aurcoflavus, from which it differs in the deeper yellow of the underparts, the bright orange shade on the head and neck, and in the base of the throat being margined with a shade of chestnut. "Iris brown; bill black; legs dark flesh-colour." Total length 5.5 inches, cullene 0.6, wing 2.9, tail 2.0, tarsus 0.85. σ , 7.76, Mombasa Island (Hildebrandt).

Female. Upper parts dull greenish yellow, with brown centres to the feathers of the back; tail dull yellow, with narrow bright yellow edges to the feathers; eyebrow and underparts pale yellow, with a brown wash on the sides of the head; wings dusky brown, with greenish edges to the feathers passing into pale yellow edges to the quills. "Bill horn brown, with the under mandible yellowish; iris brown; feet horn brown." Wing 2.8.

Boger's Golden Weaver ranges from Zanzibar into Somaliland.

The type, which is in the Vienna collection, was sent there by Boger from Zanzibar in 1824, and was first described and figured by Reichenbach under the name of *Xanthophilus*

aureoflavus (non Smith) as the type of his genus Xanthophilus.

Fischer met with the species throughout the coast-country from Bagamoio to Barawa, and mentions it as being the commonest of the Weavers in that part of Africa, nesting everywhere in trees, bushes and hedges in dry or marshy country and by the sea-shore in colonies of five or more pairs. The nest is small, of an oval form, 6 inches deep by 4 wide, constructed of green grass, with no lengthened entrance passage, is hung from a twig at 6 to 7 feet from the ground, and contains three or four eggs. The eggs vary greatly in colouring, being bluish, greyish green or greyish brown, with or without dusky spots, or else brownish yellow very closely freckled with dark brown, often inclining to form a zone near the thick end. They measure on an average 0.8×0.6 .

Fischer's specimens were collected at Zanzibar, Bagamoio, Maurui, Pangani, Muniuni, Melinda, Lamu, Wapocomoland and Barawa. Mr. Finn writes: "This bird was extremely abundant at Mombasa, especially on the island, if the dull, streaky, greenish yellow specimens, much like the females of *H. galbula*, are the females and young of *H. bajeri*, of which the brightly coloured male only appears to be known. These bright specimens are a small minority. The species is social, both in feeding and nesting; the nests are hung from the fronds of the cocoanut palms, even in the town of Mombasa. The birds feed on the low plants, where, I presume, they find insects. Nestlings were brought to me at the Fort bungalow by native boys, and a fledgling even flew into the bungalow on one occasion."

Mr. Jackson has procured the species at Witu, Erlanger obtained it in Jubaland, and Fischer at Barawa, and it has been recorded from Somaliland by M. Oustalet. The females are extremely similar to those of X. aureoflavus, and as the range is almost the same for the two species they may be easily confounded with each other.

[March, 1905.

XANTHOPHILUS SUBAUREUS

Xanthophilus subaureus.

Ploceus subaureus, Smith, Proc. S. Afr. Inst. April, 1832 *Algoa Bay*; id. Ill. Zool. S. Afr. B. pl. 30, fig. 1 (1839); Reichen. Vög. Afr. iii. p. 90 (1904).

Xanthophilus subaureus, Shelley, B. Afr. I. No. 537 (1896).

Hyphantornis subaureus, Sharpe, Cat. B. M. xiii, p. 445 (1890); Nehrkorn, Kat. Eiers. p. 129 (1899) egg; Shortridge, Ibis, 1904, p. 176 Pondoland.

Adult male. General plumage golden yellow, slightly shaded with olive on the upper parts behind the crown; forehead and front half of crown orange yellow, remainder of the upper parts olive tinted yellow, with the edges of the median and greater wing-coverts, quill and tail-feathers clearer yellow; a portion of the greater coverts and quills inclining to pale dusky brown; under surface of wings, with the exception of the ends of the quills, bright golden yellow. "Iris reddish; bill brown; tarsi and feet flesh-colour" (Stark). Total length 6-4 inches, culmen 0-7, wing 3-2, tail 2-3, tarsus 0-9. Type, J, Algoa Bay (Smith).

Adult female. Slightly smaller and duller; upper parts more shaded with olive, which colour extends forward to the bill; back with dusky brown streaks.

Immature. Upper parts ashy brown, with the lower back, edges of tailfeathers, outer edges of primary coverts and primaries yellowish; top of head faintly tinged with yellow; feathers of the mantle blackish near the shafts; pale edges to the median and greater coverts and the secondaries buff; inner edges of quills and the under wing-coverts pale yellow, with a portion of the latter, near the primaries, ashy brown; sides of head brown like the crown, fading into buff on the cheeks and underparts, which are mottled with pale yellow feathers; flanks and crop slightly more ashy brown. Total length 6.9 inches, culmen 0.7, wing 3.35, tail 2.6, tarsus 1.0. S. Afr. (Smith).

Smith's Golden Weaver inhabits the eastern half of South Africa south of the Tropic of Capricorn.

The type was discovered by Sir Andrew Smith at Algoa Bay, which is the most western range known for these Weavers. The late Dr. Stark, in his last communication to me, wrote: "Breeds abundantly in Natal, in colonies among reeds, the nests being attached to the stems of one or two reeds; eggs three, rather pyriform, white with a few black dots at the large end. They measure 0.75×0.58 . Nest composed of strips of reed-leaf, lined with fine strips and the flowering tops (drawing of nest enclosed)." From this drawing was copied the illustration (Faun. S. Afr. B. i. p. 64), in which work he adds, that in many localities in Natal and Zululand it is by far the commonest Weaver. "To an ornithologist it is a charming sight to watch these delicately coloured 'canarylike' Weaver-birds during the breeding season in November, hovering over the reed-tops or clinging to the stems while weaving their nests, all the time keeping up a ceaseless chattering, which is changed to a harsher cry if they are alarmed. These Weavers feed indiscriminately on seeds, small berries and insects."

The most northern range known to me for the species is Inhambane, where it has been met with by Mr. H. F. Francis. The bird from which I have described the immature plumage is specimen "d" (Cat. B. M. xiii. p. 466), there wrongly referred to as the type of *Plocens tahatali*, which species Sir A. Smith originally described as above olive green, beneath bright yellow. Length $5\frac{3}{4}$ inches.

Xanthophilus xanthops.

- Hyphantornis xanthops, Hartl. Ibis, 1862, p. 342 Angola; Sharpe, Cat. B. M. xiii, p. 447 (1890).
- Xanthophilus xanthops, Shelley, B. Afr. I. No. 538 (1896); Alexander, Ibis, 1899, p. 574 Zambesi.
- Ploceus xanthops, Reichen. Vög. Afr. iii. p. 88 (1904).
- Hyphantornis aurantiigula, Cab. J. f. O. 1875, p. 238 Loungo.
- Hyphantornis jamesoni, Sharpe, Cat. B. M. xiii. p. 447 (1890) Swazi, Mashona; Nehrkorn, Kat. Eiers. p. 139 (1899) cgg.
- Xanthophilus jamesoni, Shelley, B. Afr. 1. No. 539 (1896).
- Ploceus xanthops jamesoni, Reichen. Vög. Afr. iii. p. 90 (1904).
- Hyphantornis camburni, Sharpe, Bull. B. O. C. x. p. 35 (1900) Mt. Kenya. Ploceus xanthops camburni, Reichen. Vög. Afr. iii. p. 90 (1904).

Adult male, type. Forehead and front half of the crown deep golden yellow, remainder of upper parts shaded with olive; wings dark brown

XANTHOPHILUS XANTHOPS

with pale edges to the feathers, mostly olive yellow, but inclining to bright yellow on the ends of the median coverts and edges of the inner secondaries; inner margins of the quills yellowish buff; under wing-coverts golden yellow like the underparts generally and sides of head; throat with a tinge of chestnut. "Iris yellow; bill black; tarsi and feet brown" (Alexander). Total length 7 inches, culmen 0.8, wing 3.6, tail 2.6, tarsus 1.1. Angola (Monteiro).

Adult female. Differs only in the absence of bright yellow on the forehead and crown, which parts are of the same olive shade as the mantle. Culmen 0.75, wing 3.35, tarsus 0.95. $\$, Loango (Forbes's Coll.). Type of Hyphantornis jamesoni. Differs from the type of the species in

Type of Hyphantornis jamesoni. Differs from the type of the species in having the yellow on the forehead and crown slightly more restricted. Wing 3.7, tarsus 1.1. \mathcal{J} , 11.9.80, Umfuli R. (Jameson).

Immature. Bill not entirely black, otherwise it agrees well with the adult female from Loango above described. "Iris hazel; bill dark brown; tarsi and feet pale brownish." Wing 3.3. \mathcal{J} , 17. 7. 99, Nairobi (H. J. Mackinder).

Hartlaub's Golden Weaver ranges over the greater portion of Southern Tropical Africa, from the Loango Coast into Benguela, and through Central and Eastern Africa from Swaziland to the Equator.

The species varies slightly in its shade of colouring, the brighter, yellower specimens predominating toward its northern range, to which *Hyphantornis aurantiigula*, Cab., and *H. camburni*, Sharpe, belong, while *H. jamesoni*, Sharpe, is the duller, greener form from south of the Zambesi. I do not consider it advisable to recognise any of these as subspecies.

With regard to its range in Western Africa, there are, in the British Museum, four specimens from Chinchonxo and Landana, collected by Petit; two of Sperling's from Kabinda; two from Angola, including the type; and four of Anchieta's from Quissange, Capangombe, Rio Chimba and Macongo. Respecting the type, Mr. Monteiro, who discovered the species, writes: "Native name, '*Dicole*.' Weavers nest on tall grass, &c., particularly near and over water. Common everywhere." In the Lisbon Museum there is one of Whiteley's specimens

from the Quanza, and others collected by Anchieta at Caconda and Quindumbo, where they are known to the natives as the "Tialala" at the former place, and as the "Janja" at the latter. Prof. Bocage observes that the specimen from the Quanza is remarkable by the chestnut shade on the throat, apparently agreeing in this respect with the types of *Hyphantornis aurantiigula*, Cab., and *H. camburni*, Sharpe.

To the south of the Zambesi, T. E. Buckley procured a specimen in Swaziland, Mr. Cavendish one at Mapicuti in the Beira district, and Jameson the type of *H. jamesoni*, Sharpe, at the Umfuli River; these, as well as three of Bradshaw's specimens from the Makalaka country, are in the British Museum. Mr. Guy Marshall remarks: "This fine species is by no means common. I have seen it on the Hanyani and Umfuli Rivers, and it occurs sparingly along the streams near Salisbury."

Mr. Boyd Alexander, during his expedition up the Zambesi, "first met with the species at Chicowa, frequenting the shady portions of the river's bank in pairs, and in company with Bulbuls (*Pyenonotus layardi*). As we journeyed further west they became more plentiful, and at the end of November building had commenced. The tunnelled nests were hung from pendent branches of thick bushes near running water, and were never in colonies like those of other Weavers, but each pair of birds had their own particular thicket. The song of the male is a loud running chatter, kept up without intermission for some seconds. The plumage of the immature male is similar to that of the adult female."

The species is generally distributed over Nyasaland, specimens having occurred in eight separate collections, from Zomba to the Tanganyika plateau, as well as at five intervening places. To the east of Lake Tanganyika Böhm found the species abundant, but shy, generally in pairs frequenting

PLOCEUS

the thick bush and reed-beds near water, and were breeding both in September and March. The eggs, almost invariably only two in number, vary greatly in colouring, some being greenish blue, others brownish or whitish, and nearly always with reddish brown marks. The specimens examined by Mr. Nehrkorn were uniform bluish green or spotted with light and dark grey, and measured 1.0×0.64 . Hildebrandt found it breeding in May at Kitiu, in Ukamba.

Mr. Oscar Neumann procured a pair at Kwa Mumia, in Kavirondo; Dr. Ansorge met with it in Toru, and Mr. C. Camburn procured the type of *Hyphantornis camburni* at Mount Kenia in the Nairobi Forest at 5,500 feet, and remarks: "Common; observed in small flocks; known to Maisai natives as '*Ging-yangiki*.'" Emin found the species in the Mombuttu country, which is the most northern range known for these Weaver-Birds, and also met with it along the Victoria Nyanza at Bukoba and Bussisi.

I may mention that adults, male and female, collected by Lord Delamere at Munisu, on the north-east of Mount Kenya, and at Nairobe, agree perfectly with the Angola birds.

Genus XXIV. PLOCEUS.

Bill deeper than broad, shorter than the head, almost flat at the sides, with the cutting edges slightly festooned; nostrils exposed just in front of the frontal feathers; culmen rounded, slightly curved, and forming a basal angle on the forehead. Wings rounded; primaries 1 more than a third of 3, which is one of the longest, 2 and 8 about equal. Tarsi and feet moderately strong; claws strong, curved and sharp; hind toe with claw about equal to the middle toe with claw. No black on sides of head; abdomen and under tail-coverts white-brown.

Type. Ploceus, Cuv. Règne An. i. p. 383 (1817) *P. baya.*

The genus inhabits Southern Asia eastward from India to Java and Sumatra, also Ceylon and Madagascar and comprises several Asiatic and one Madagascar species.

PLOCEUS SAKALAVA

Ploceus sakalava.

Ploceus sakalava, Hartl. Beitr. Faun. Madag. p. 54 (1861) Madagasear ;
 Milne, Edw. and Grand. Hist. Madag. Ois. p. 453, pls. 177a, fig. 1;
 178, and 304, fig. 7 egg (1885); Sibree, Ibis, 1891, p. 441; Shelley,
 B. Afr. I. No. 496 (1896).

Nesacanthis sakalava, Sharpe, Cat. B. M. xiii. p. 487 (1890) Madagascar.

Adult male. Entire head and throat bright yellow; back, wings and tail earthy brown, with slightly paler edges to the feathers; under wingcoverts and inner margins of the quills buff; breast and under tail-coverts buff, shaded with ashy brown, most strongly so on the flanks; thighs yellowish. "Iris brown; bare skin round the eyes pink; bill pearl grey; tarsi and feet rosy" (Grandidier). Total length 5.4 inches, culmen 0.7, wing 3.2, tail 2.3, tarsus 0.85.

 \overline{Female} . Differs in having no yellow on the plumage; forehead and crown brown like the back; sides of head and neck ashy, with a broad rufous buff eyebrow, and a band of that colour beneath the eye; under parts paler, fading into white on the upper throat, down the centre of the breast and ou the under tail-coverts. "Bare skin round the eye greenish" (Grandidier). Wing 2.9.

The Sakalava Weaver is confined to Madagascar.

This species may be looked upon as the representative of *Nelicurvius nelicourvi* in the woodlands of the West Coast, and both birds are known to the natives by the same name, "Folisay." They much resemble each other in their feeding and general habits, but the nests of the present species are constructed so closely together that they form a single mass in the tree they have selected.

The type of the species, an adult male, formerly in Sir Andrew Smith's collection, is now in the British Museum. This species, which has no nuchal-hairs, may be said to represent the Asiatic element in Madagascar, for I see no character for not placing it in the Asiatic genus *Ploceus*; while *Nelicurvius nelicourvi*, with its nuchal-hairs, represents the African contingent, and in a way they lead from *Ploceus* into the Hyphantornis group of genera, which can hardly be distinguished by other characters than the pattern of colouring, which is often recognisable in full plumaged birds only.

FOUDIA

Genus XXV. FOUDIA.

Resembles *Ploccus* and *Hyphantornis* in its general structure, and inclines toward the former in the abdomen never being yellow or clear white. It is characterised by the tail being perfectly square; the nostrils opening at the extreme base of the bill just in front of the frontal feathers; a blackish band through the eye. The males have a dull olive-shaded plumage for the winter, similar to that of the females, but assume for the breeding season, generally, a much brighter plumage with some red in it.

Type.

Fondia, Reiehenb. Syst. Av. pl. 79, fig. 2 (1850)
F. madagascariensis.
Nesacanthis, Sharpe, Cat. B. M. xiii. p. 483 (1890)
F. eminentissima.
Neshyphantes, Shelley, B. Afr. I. p. 36 (1896)
F. flavicans.

KEY TO THE SPECIES.

a. With red or yellow on the nead; bin black black black	i orceaing plumage.
a^1 . Bill stouter; culmen more eurved; head red.	
a ² . Bill slighter; mantle red, striped with black,	
abdomen red like the general plumage.	
a^{3} . Smaller; wing about 2.65	madagascariensis.
b^3 . Larger; wing 3.3	aldabrana.
b ² . Bill stouter: mantle olive brown; abdomen	
whitish	eminentissima.
b^{1} . Bill slender; eulmen nearly straight.	
c^2 . Head and throat red; back olive brown with	
the rump red	rubra.
d ² . No red on the body.	
c^3 . Head and throat yellow, shading in front	
into orange red	flavicans.
d^{3} . Front of crown and the upper throat pale	
yellow	
b. No red or yellow on the plumage; bill brown	Females and males in winter.

Foudia madagascariensis.

Loxia madagaseariensis, Linn. S. N. i. p. 300 (1766). Foudia madagaseariensis, Sharpe, Cat. B. M. xiii, p. 433 (1890) Madagascar, Réunion, Mauritius, Amirante Isl., Seychelles ; Sibree, Ibis, 1891, p. 441; Butler, Foreign Finches in Captivity, p. 304, pl. 59, figs. 1, 3 (1894); Ridgway, Proc. U. S. Mus. 1895, p. 514 Sey-

chelles; Shelley, B. Afr. I. No. 497 (1896); Nehrkorn, Kat. Eiers.
p. 129 (1899) egg; Oberholser, Proc. U. S. Mus. xxii, p. 246 (1900)
Madagasear.

Ploceus madagascariensis, Milne, Edw. and Grand, Hist. Madag. Ois. p. 449, pls. 177*a*, fig. 3; 181, 182, 304, fig. 9 *egg* (1885).

Male in full plumage. Scarlet shaded vermilion; a black patch encircling the eye; mantle with broad black shaft-bands to the feathers; tail-feathers dark brown, with obsolete narrow olive edges, inclining to red on the centre pair; wings dark brown, with very narrow olive edges to the feathers, excepting the median coverts which have broad buff terminal margins; under wing-coverts buff, and the inner edges of the quills whitish. Iris brown; bill black; tarsi and feet flesh-colour. Total length 5 inches, culmen 0.55, wing 2.7, tail 2.0, tarsus 0.8. (Scralalam Brit. Mus.).

Adult female. No red on the plumage; upper parts olive brown, mantle with broad blackish shaft-bands to the feathers, and obscure, narrow, dark stripes on the crown and hind neck; wings and tail as in the male; sides of head and the under parts brownish buff, inclining to white down the centre of the breast. Iris brown; bill pale brown; slightly darker towards the culmen; tarsi and feet flesh-colour. Wing $2\cdot4$. 2, 2. 81, Ankafana (Cowen).

The Madagascar Fody inhabits Madagascar, Réunion, Mauritius and many of the islands of the Seychelles Archipelago, and has been introduced on St. Helena.

I see no good reason for supposing that it is not a native of all the islands of the Pacific Ocean where it is known to occur. It is a different matter with St. Helena, there it has fairly recently established itself, and multiplied to such an extent that it has become a nuisance to the farmers.

The plumage differs greatly according to the sex and season; there is also a beautiful variety with bright golden yellow instead of red on the plumage, which is apparently of no uncommon occurrence both in Madagascar and St. Helena. The breeding plumage, "M. Grandidier informs us, is assumed in October, when the colour of the bill in the male also changes from brown to black. They do not frequent the forests, but are otherwise distributed over Madagascar, and as soon as the breeding season is finished, assemble in large flocks to feed in the rice-fields. They do not breed in colonies, but in separate trees, and lay four or five eggs, which are of a pale bluish green and measure on an average 0.76×0.52 .

The species is generally known to the natives as the "Fody," and they distinguish the full plumaged male as the "Fodymena" (Red Fody) and those in the dull female plumage as the "Fodymata" (unripe Fody).

Dr. Russ writes: "In ornamental plumage, which in Madagascar the males assume in October, and on Réunion in November and December, they fight one another furiously. The naturalist, Pollen, describes the nest as pear-shaped, with lateral entrance hole, made of fine grasses, plaited between two or four branches of acacia, mimosa, tamarisk, &c., sometimes also in a reed-thicket. Lafresnayes, on the other hand, figures the nest of a longish round shape and suspended between thin twigs.

"The nest has the form of a retort with the tube cut off, yet the upper roof projects somewhat over it, while the front of the outer wall hangs down so that the entrance leads up to it from below." The nest, he informs us, is so thin that it can be seen through, but is very firmly woven and measures 4 inches deep by 2.5 broad. The eggs are hatched in about fifteen days, and the young are at first dark brownish. On the third day, after leaving the nest, they are tolerably strong on the wing and able to follow their parents, the male assisting in feeding them. As a rule, three broods are reared in a year.

The species is apparently abundant on Réunion, Mauritius and the Seychelles. In this latter archipelago Dr. Abbott has collected specimens on Mohé, Amirant and the Isle des Roche.

Foudia bruante.

Fringilla bruante, P. Z. S. Müll. S. N. Suppl. p. 164 (1776) *Réunion*. Emberiza fuscofulva, Bodd. Tabl. Pl. Enl. p. 20 (1783). Nesacanthis fuscofulva, Sharpe, Cat. B. M. xiii. p. 484, note (1890). Emberiza horbonica, Gm. S. N. i. p. 886 (1788).

The Bourbon Fody was a native of the Island of Réunion, but is now apparently extinct.

In the "Catalogue of Birds in the British Museum," Dr. Sharpe writes: "This species seems to be extinct, cf. Sir E. Newton (Trans. Norfolk and Norwich Nat. Soc. 1889, p. 543). It has generally been considered identical with *Foudia mada*gascariensis," I can see no special reason for believing that identification to be incorrect; but as the type apparently no longer exists we are not likely to know anything more about it.

Foudia aldabrana.

Foudia aldabrana, Ridgway, Proc. U. S. Mus. xvi. p. 598 (1893) Aldabra Isl.

Neshyphantes aldabranus, Shelley, B. Afr. I. No. 502 (1896).

Type. Similar to F. madagascariensis, but very much larger. Total length 6.5 inches, culmen 0.75, wing 3.3, tail 2.1, tarsus 0.92., \mathcal{J} , ad. 5. 10. 92, Aldabra Isl. (Abbott).

The Aldabra Fody inhabits the island of that name.

The species was discovered by Dr. Abbott on the Island of Aldabra, which lies in the Pacific Ocean about 250 miles North-west of the northern extremity of Madagascar, and 500 miles from Zanzibar. The species is known to me only by the description of the type, but the measurement of the wing, $3\cdot3$ inches, readily distinguishes it from its nearest ally, which has a wing measurement of $2\cdot65$.

Foudia eminentissima.

Foudia eminentissima, Bp. Consp. i. p. 446 (1850) Zanzibar; Shelley, B. Afr. I. No. 498 (1896).

Nesacanthis eminentissima, Sharpe, Cat. B. M. xiii. p. 484 (1890) Johanna Isl., Great Comoro Isl.; Butler, Foreign Finches in Captivity, p. 308, pl. 59, fig. 2 (1894).

Ploceus algondæ, Schl. P. Z. S. 1866, p. 423 Mayotte Isl.

Calyphantria comorensis, Cab. in Decken's Reis. iii. p. 31, pl. 10 (1869) Mayotte Isl.

Foudia consobrina, Milne, Edw. and Oust. C. R. Acad. Sc. 1885, p. 222.

Plocens (Foudia) anjuanensis, Milne, Edw. and Oust. N. Arch. Mus. (2) vi. Bull. p. 271 (1888).

Adult male. Head, entire neck, rump and upper tail-coverts vermilion or orange red; mantle, wings and tail dusky black, with olive green edges to the feathers, broad on the mantle, wing-coverts and inner secondaries, where they are sometimes tinted with scarlet, narrow on the tail-feathers and most of the quills; lower back more uniform olive; under surface of wings dark brown, with the coverts and inner edges of the quills buff; a black patch on the side of the head extending back from the upper mandible surrounds the eye and narrows to a point over the ear-coverts; breast ashy white washed to a variable extent with red and shaded with ashy olive on the flanks and under tail-coverts. "Iris reddish brown; bill black; tarsi and feet flesh-colour" (Butler). Total length 5-7 inches, culmen 0-7, wing 3.0, tail 2.2, tarsus 0.9. \mathcal{J} , Great Comoro (Kirk).

Adult female. Differing in having no red on the plumage; top of head, runp and upper tail-coverts brown with a slight olive shade; eyebrow and underparts ashy buff, with the flanks, thighs and under tail-coverts browner, and a dusky band through the eye. Bill pale brown. Wing 2-9. Johanna Isl. (Kirk).

Winter plumage. Alike in both sexes, the male only assuming the red for the breeding season.

The Comoro Fody inhabits the Comoro Islands.

Dr. P. L. Sclater wrote in 1864: "The Comoros are a group of four islands lying in the northern part of the Mozambique Channel, between Madagascar and the opposite coast of Africa. They are all of volcanic origin, and probably of quite recent formation; but only one of them (Great Comoro) is now an active volcano, the other three (Mohilla, Johanna, or Anjuan, and Mayotte) being in a quiescent state."

FOUDIA EMINENTISSIMA

The species was first made known by specimens sent to Europe from the African Coast; the type being received by Verreaux from Zanzibar, and an immature bird occurred in the collection made by Sir John Kirk during the Livingstone Expedition. In the "Ibis" for 1864, when he published a list of the birds in that collection, he did not mention the species; but it is recorded in his collection from the Comoro Islands in the same number of the "Ibis" by Dr. Sclater, as "*Foudia madagascariensis*, Mohilla (Kirk). 'Obtained in a reedy marsh near Oane.'"

During a later expedition to this group of islands Sir John Kirk collected for me seven specimens from Great Comoro and nine from Johanna. In this latter island, according to Mr. Bewsher, it is not common, but is known to the natives as the "Paramoran," and he procured the eggs, which are pale blue, and measure 0.84×0.6 .

The type of *Ploceus algonda* was obtained by Pollen on Mayotte, from which island also came the type of Caluphantria comorensis. I extract the following from Mr. Butler's notes in his "Foreign Finches in Captivity": "It regularly assumes its bright colouring in April, retaining it for fully six months. Canary seed is the staple food of this and the allied Weavers, but it is very fond of spray millet and paddy-rice. In disposition and voice it resembles F. madagaseariensis, but in a cage the two species are incessantly disputing, and the more beautiful, but commoner bird, always comes off second best. Indeed, the two birds would be better kept apart, for in the spring of 1894, one of my Madagascar Weavers, after living in constant warfare with another male of its own species and the Comoro bird, was killed by the latter. Probably such an occurrence is extremely rare, for the battles of Weaver-Birds, though very noisy, and accompanied by a great display of ruffled and quivering plumage, rarely results in actual blows."

Foudia rubra.

Emberiza rubra, Gm. S. N. i. p. 877 (1788).

Neshyphantes ruber, Shelley, B. Afr. I. No. 499 (1896).

Nesacanthis rubra, Sharpe, Cat. B. M. xiii. p. 485 (1890) Mauritius.

Fringilla erythrocephala, Gm. S. N. i. p. 903 (1788).

"Foudia martineti, Gray," Müll. J. f. O. 1856, p. 114 Mauritius.

Fringille cardaline, Vieill. Ois. Chant. p. 52, pl. 28 (1805).

Adult male. Similar to Foudia eminentissima, but differs in its smaller bill and the red not extending below the crop. Head, upper neck and entire throat vermilion; mantle olive, with brownish black centres to the feathers; lower back and upper tail-coverts olive, crossed by a broad vermilion band; wings brownish black, median coverts with broad buff ends, greater coverts with olive edges inclining to white at their ends, quills more narrowly edged with olive; under wing-coverts olive shaded buff, inner edges of quills buff; tail dark brown with narrow olive edges to the feathers; sides of head with a black patch extending from the base of the upper mandible near the gape, round the eyes, and narrowing to a point at the end of the ear-coverts; breast, thighs and under tail-coverts dusky olive, inclining to yellowish buff down the centre. Iris brown; bill black; feet pale brown. Total length 5·1 inches, culmen 0·6, wing 2·8, tail 1·6, tarsus 0·85. Mauritius.

Adult female. Differs from the male in the absence of red on the plumage; crown, back and sides of neck, lower back and upper tail-coverts uniform olive; sides of head and the entire throat yellowish buff, inclining to olive on the ear-coverts and to white on the chin. \circ , Mauritius (Bewsher).

The Mauritius Fody is confined to the Island of Mauritius. According to Mr. E. Newton its note resembles that of *Zosterops* chloronotus.

The nest is hung from the outer twigs of a bush or tree at from 5 to 15 feet from the ground, is of an oval form, with the entrance in the lower part; externally it is decorated with dead leaves, green moss, shreds of creepers, &c., and is warmly lined with feathers. The eggs, three in number, are of a very pale blue, and measure 0.8×0.55 .

The nest has been figured (Rev. et Mag. Zool. 1850, p. 326, pl. 6).

Foudia flavicans.

Foudia flavicaus, E. Newton, P. Z. S. 1865, p. 47, pl. i. figs. 1, 2 Rodriguez Isl.; Sharpe, Cat. B. M. xiii, p. 434 Rodriguez.
Ploceus flavicaus, Schl. P. Z. S. 1866, p. 424.
Neshyphantes flavicaus, Shelley, B. Afr. I. No. 500 (1896).

Male in full plumage. Front of head orange scarlet, quickly passing into bright yellow on the remainder of the head and throat; back of neck and the back brown, with broad blackish shaft-bands to the feathers of the mantle, and a narrow yellow band across the rump; tail dark brown with very narrow olive yellow edges to the feathers; wings dark brown, with the lesser coverts slightly paler; ends of median coverts and the whole of the greater coverts broadly edged with buff, quills with slightly darker pale edges, narrowest on the primaries, where they have a slight olive yellow tinge; inner margins of quills whitish; under wing-coverts like the breast and under tail-coverts buff, with a slight ashy brown shade strongest on the flanks. Iris brown; bill black; feet pale brown. Total length 5 inches, culmen 0:55, wing 2:8, tail 2:0, tarsus 0:9. Rodriguez (H. H. Sclater).

Female. Differing in having no red or yellow on the plunage; upper part of head and neek brown like the back; sides of head rather paler, with the indication of a buff eyebrow; under parts dull yellowish buff, with the flanks and under tail-coverts browner. Iris brown; bill and fect pale brown. Wing 2.65. 9, 10.7.04, Rodriguez (E. Newton).

The Rodriguez Fody is confined to the Island of Rodriguez.

This, the "Yellow-bird" of the colonists, was perfectly tame, according to Mr. E. Newton, and has a very pretty song not unlike that of our Goldfinch. In habits it resembles F. ruber, "in its way of picking amongst the extreme buds and leaves of branches, hanging often back downwards. Its beak is long, and more like that of this species than of F.madaguscariensis. It is exceedingly numerous, and though many had paired and were evidently breeding, I saw a flock of at least one hundred, all in the brown stage of plumage, and probably many of them therefore immature birds. The adult hens are dark brown, like the same sex in the other two species."

The nest resembles that of *F. ruber*. The eggs, three in number, are of a very pale blue, and measure 0.72×0.56 .

FOUDIA SEYCHELLARUM

Foudia seychellarum.

Foudia seychellarum, E. Newton, P. Z. S. 1867, p. 346 Marianne Isl. Neshyphantes seychellensis, Shelley, B. Afr. I. No. 501 (1896).

Nesacanthis seychellarum, Sharpe, Cat. B. M. xiii. p. 486 (1890) Seychelles Isls.; Ridgway, Proc. U. S. Mus. 1895, p. 514 Ile Cousin, Marianne Isl.

Adult male. Upper parts dark brown, with olive edges to the feathers; forehead and most of the crown yellow; mantle mottled, with dark brown centres; middle and lower back uniform olive brown; wings and tail dark brown, the feathers narrowly edged with olive, inclining to yellow on the primaries; under wing-coverts and inner edges of the quills ashy buff; sides of head olive brown, with a large blackish patch from the bill round the eyes and extending over part of the ear-coverts; cheeks and upper throat pale yellow; passing into buff on the chin; remainder of the underparts pale yellowish ash, with the flanks browner. Total length 5·3 inches, culmen 0·7, wing 3·0, tail 2·0, tarsus 0·85. \mathcal{J} , Marianne Island (E. Newton).

Adult female. Similar to the male, but differs in having no yellow on the head or throat; entire forehead and crown olive brown; chiu and upper throat buff. Wing 2.9.

Male in winter. Similar in plumage to the female.

The Seychelles Fody inhabits the Seychelles Islands.

On February 12, 1866, Mr. E. Newton landed on Marianne in quest of a bird known on that island as "Le Mangeur de riz," which proved to be the present species; shot the three typical examples and observed some fifty to a hundred similar dull coloured specimens, and wrote: "In habits these birds are gregarious, and I should imagine, live chiefly on grass-seed, they are said also, as their name implies, to eat rice. The proprietor of Marianne told me the species was also found at Ladigue, but was not plentiful there."

Mr. E. Perceval Wright has since found the species on Frigate Island, and Dr. Abbott on Ile Cousin.

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