Article XII.— DIAGNOSES OF APPARENTLY NEW COLOMBIAN BIRDS, 1 II.

By Frank M. Chapman.

PLATE XIII. SKETCH-MAP OF SOUTHWESTERN COLOMBIA.

Continued work on the birds secured by the Museum's expeditions in western Colombia showed that in many instances satisfactory identification was not possible without comparison with freshly collected material from what is known as the 'Bogotá Region,' whence at least 200 species of birds have been described. Many of these species are, it is true, represented in our Museum by the characteristic, native-made 'Bogotá' skins. These, however, are not only without data, but in a large number of cases, they have so changed color that their scientific value has been destroyed. They are, in fact, worse than useless since comparison with them may lead to erroneous conclusions.

An expedition was therefore despatched to Bogotá on January 6, 1913, and it returned to New York early the following May. It was in charge of the writer who was accompanied by George K. Cherrie, Louis A. Fuertes, Thomas M. Ring, Paul G. Howes and Geoffroy O'Connell. Collecting was begun in the Magdalena Valley and pursued at a number of stations across the Eastern Andes through Bogotá to Villavicencio, at their eastern base. Some 2300 specimens, representing somewhat over 500 species, were secured, a number indicating the remarkable richness of the avifauna of the region.

In due time, in addition to a general summary of the results of our explorations in Colombia, it is proposed to publish a special paper on our work in the Bogotá region, in which the subject of change of color in native-made skins, the limits of the 'Bogotá' region and its faunal characteristics will be treated.

With this new material I have resumed the study of our now extensive Colombian collections, but the task of critically examining some 11,500 specimens of birds is a large one and will require much time. It is, therefore, planned to issue, as occasion requires, papers which, like the present, contain descriptions of proposed new species, with the double object of retaining the types for the American Museum and of securing criticism on the views set forth, in advance of the appearance of the final report.

For the loan of specimens used in the preparation of this paper cordial

¹ See also Diagnoses of Apparently New Colombian Birds. Bull. Amer. Mus. Nat. Hist., XXXI, pp. 139-166, July 23, 1912.

acknowledgments are due Dr. Chas. W. Richmond of the United States National Museum, Dr. Witmer Stone of the Philadelphia Academy of Natural Sciences, Mr. Outram Bangs of the Museum of Comparative Zoölogy, Mr. W. E. Clyde Todd of the Carnegie Museum, and Mr. C. B. Cory of the Field Museum.

Ridgway's 'Color Standards and Color Nomenclature' 1 has been employed in describing plumages.

Ortalis columbiana caucæ subsp. nov.

Char. subsp.—Similar to O. c. columbiana Hellm., but with the forehead little if any paler than the crown, the lower back, rump, flanks, crissum and under tail coverts more strongly rufous chestnut; feet horn color instead of red.

Type.— No. 108673, Am. Mus. Nat. Hist., Guengüe, Cauca Valley, 20 miles south of Cali, May 5, 1911; F. M. Chapman.

Remarks.— Hellmayr 2 states that an examination of the type of Wagler's "Ortalis caracco" shows it to be closely allied to, and perhaps identical with Ortalis albiventris of eastern Brazil, and that consequently Grant 3 was in error in applying this name to the Colombian bird which he therefore (l. c.)separates under the name Ortalis columbiana. There appear, however, to be two well-marked forms of this species in Colombia one of which occurs east of, the other west of the Central Andes. Hellmayr's type is unfortunately without locality, but his description seems to apply to the eastern rather than to the western bird, which has the forehead of essentially the same color as the crown and not "weisslichgrau," as Hellmayr describes his type.

While the under tail-coverts of all our eleven specimens of the bird which I assume to be true columbiana show sufficient rufous-chestnut to correspond with Hellmayr's description of this part as "kastanienrot," none has the character so strongly developed as in our four specimens of caucæ in which this color spreads to the lower ventral region, flanks and sides of the rump.

If my understanding of the case be correct, columbiana, therefore, is the bird of the Bogotá region (3 specimens) and upper Magdalena Valley (San Agustin, La Candela, Andalucia, 5000 ft. (9 specimens), while cauca occupies the Cauca region where it is locally common in the valley and ascends to the border of the Subtropical Zone (Guengüe, 1; La Manuelita, 1; San Antonio, 2, "legs and bill gray").

Color Standards and Color Nomenclature. By Robert Ridgway, with 53 colored plates and 1115 named colors. Washington, D. C., 1912. Published by the author.
Abhandl. Akad. München, XXII, 1906, p. 694.

² Cat. B. M., XXII, p. 509.

Porphyriops melanops bogotensis subsp. nov.

Char. subsp.— Similar to P. m. melanops but axillars not barred, the upperparts darker, the interscapulars in the adult largely chestnut, like the wing-coverts.

Type.— No. 121412, Am. Mus. Nat. Hist., ♂ ad., Savanna of Bogotá, Colombia Feb. 18, 1913; T. M. Ring.

Remarks.— In addition to the type I have an adult female (with all the wing-quills in the sheaths) collected by Howes, an adult female and immature male collected by Fuertes, and an old, but well-preserved, 'Bogotá' skin of an adult. In one of the five Bogotá specimens the axillars are wholly white, in the others they are dusky basally with a spot or two toward the tip, but in none are they barred.

Of P. m. melanops, the National Museum has supplied one specimen from Paraguay, one from the Parana and one from Conchitas, near Buenos Aires, and one from Chile, while two additional specimens from Chile are in the American Museum collection. Four of these specimens have the axillars crossed by four or five bars, in the fifth the bars do not fully cross the feathers. An adult from Temuco, Cautin, Chile (Am. Mus. 113373) is considerably larger (wing, 136; tail, 61; tarsus, 45; middle toe culmen, 34 mm.) than either Paraguay or Bogotá birds (which agree in size) and is more olive above than two birds entering adult plumage from Conchitas and Paraguay. All three specimens agree, and thereby differ from Bogotá adults, in lacking chestnut on the interscapular region.

Of the several names which have been applied to this species none appears to be applicable to the form here described. Fulica crassirostris Gray,¹ from "South America" is described as having "the mantle and quills deep brown;" "the wing-coverts and the irides bright brown." The description of the bill as "remarkably high" and its appearance in the plate following the text, suggests that possibly the large Chilian form was here referred to.

Crex femoralis Tschudi,² the habitat of which is given as "in sylvis apud flumen Tullumayo," is described as having the back olivaceous."

Porphyriops leucopterus Salvad., based on two specimens in the Museum of Turin (No. 4405 Arg. Republic; No. 5658 "Amer. Merid." probably Buenos Aires) is evidently a pure synonym of melanops Vieill. of Paraguay, which is based on Azara. The character of margined tertiaries claimed for this form is shown by specimens from Paraguay, Chile and Bogotá, never-

¹ Griffiths' Cuvier's Animal Kingdom, III, 1829, p. 542, pl.

² Arch. für Nat., 1843, p. 388.

Atti Soc. Ital. Nat., VIII, p. 382, 1865. I have to thank Mr. Witmer Stone for investigating this reference for me.

theless, Sclater (P. Z. S., 1868) states that *leucopterus* is different from *melanops* but may be identical with *femoralis*. He adds: "There is a specimen of this bird in the Derby Museum, Liverpool, from Bogotá. It seems to be a good second species of the genus *Porphyriops*." While, therefore, Sclater recognized the distinctness of the Bogotá form, he misapplied to it the name *leucopterus*, which, as we have just seen, is a synonym of *melanops*.

Fulica americana columbiana subsp. nov.

Char. subsp.— Similar to F. a. americana, but tarsi and toes longer, bill heavier and longer, frontal shield larger, higher, rounded posteriorly and more clearly defined from the bill anteriorly; bill basally, in breeding specimens, yellowish; plumage, particularly of the underparts, darker, more slaty, the under wing-coverts darker and with little or no white edgings; the white at the ends of the inner secondaries averaging less in extent and confined largely to the inner web of the feathers.

Type.— No. 126404, Am. Mus. Nat. Hist., o⁷ ad., La Herrera (alt. not stated), N. of Bogotá, Cundinimarca, Colombia, May 13, 1913; Manuel Gonzales.

Remarks.— Of this well-marked form we have thirteen specimens collected at La Herrera and La Olanda in Cundinimarca north of Bogotá on May 11 and 13, 1913. Of this number eleven are fully adult, one is immature, and one is molting from juvenal into 'first winter' plumage. The collector made no note of the colors of the bill and shield in life, but two months after death the shield is dull, dark maroon approaching diamine-brown, the bill to the anterior margin of the nostrils is olive-ochre, its surface more or less scaly, the tip and commissure as far backward as a point opposite the middle of the nostril horn-color, marked on the maxilla by a band, on the mandible with two quadrate spots (separated by the gonys) of approximately the same color as the shield.

It is possible that the differences in general color mentioned may be in part attributed to the greater age of our skins of americana. Since, however, they are more pronounced on the underparts than above, it is probable that to some extent, at least, they actually exist.

In Fulica caribæa, of which the National Museum has loaned me six specimens, including the type, the shield appears to be yellowish or orange, of the same color as the bill, from which it is not sharply defined as in columbiana. In other words, the shield in caribæa might be described as a basal inflation of the culmen with which it is continuous, while in columbiana it is a dark maroon ellipse set on the forehead and clearly distinct from the base of the culmen both in color and structure. Indeed so far as the shape and color of the shield is concerned, columbiana more nearly resembles americana than it does caribæa, and it is even nearer, in this respect, to

certain specimens of Fulica ardesiaca. In ardesiaca the bill and its shield are much larger, as might be expected, the tip of the bill is greenish and its broken band is lacking, but aside from these differences the bill of ardesiaca, in general proportions and in the color and isolation of the shield, strongly suggests that of columbiana.

It is true that ardesiaca is placed in that section of the genus containing species with no white on the secondaries, nevertheless a trace of this character is usually present and this fact in connection with the reduced amount of white in the secondaries of columbiana and the resemblance in the bill of the two species just mentioned, points to the conclusion that ardesiaca is a representative of americana.

From F. leucoptera, columbiana differs in its larger size, particularly of feet and bill, in the color of the bill and shield (both yellow in leucoptera) and in its more elevated and clearly defined shield. The Hawaiian F. alai, the remaining species of Fulica having the secondaries tipped with white, agrees with leucoptera in the color of the bill, but has this member larger and with a more inflated frontal shield.

Measurements.

			Middle-	Culmen from	Depth of bill at ant.	Sh	ield
		Tarsus	toe	base of shield	margin of nostril	Length	Width
columbiana,	♂	60	91	48.5	10.5	16	8.2
"	o⊓	60	93	53.5	12	18.5	11.5
"	♂¹	60	90	48	11	16	8
"	♂	64	96	49	11	15	10.5
"	Q	63	90	54	12	20	12
americana,1	♂	59	87.8	45	10.8	8	9.5
"	♂	53	80.5	46.5	9.5	13	8.6
"	o™	56	85	49.4	10.5	10.5	9.3
"	Q	49	74.5	44	9.3	12.2	9.5
"	Q	54	81	44.5	9.8	9.7	7

Ixobrychus exilis bogotensis subsp. nov.

Char. subsp.— Similar to I. e. exilis but slightly smaller; adult male in breeding plumage with the underparts more richly colored; the breast, abdomen, flanks, under wing and under tail-coverts warm buff, the thighs deeper in tone; the median and lesser wing-coverts richer, mainly ochraceous buff more or less margined with tawny-russet; adult female more nearly resembling adult female of I. e. exilis but the abdominal region, flanks, thighs, under wing and under tail-coverts deeper, warm buff; the back slightly darker; immature male much richer in color than I. e. exilis of same age; underparts heavily washed with ochraceous-buff; central wing-covert

¹ Spring adults from New York, Iowa, and Minnesota.

area ochraceous tawny; in adult and immature, tarsi black, toes brownish, their soles yellowish.

Type.— No. 121432, Am. Mus. Nat. Hist., ♂ ad., testes much enlarged, Suba. Marshes, Bogotá, Colombia, February 17, 1913; F. M. Chapman.

Measurements.

	Wing	Tail	Tarsus	Culmen
Ad. σ .	116	42	38	40
Ad. ♀.	113	43	37	37
Im. σ .	116	43	40	38

Remarks.— Ixobrychus exilis is apparently a rare bird in South America. It is not included in Brabourne and Chubb's 'List of the Birds of South America' (1912), but is stated in the A. O. U. 'Check-List,' (1910), to occur as far south as Brazil. The discovery of a local race of this boreal species on the Bogotá Savanna is therefore a fact of rather exceptional interest. An apparently mated pair, both having the sexual organs enlarged, was taken on February 17, and an immature male, taken January 21, was purchased by Mr. Fuertes from a local collector. Doubtless the bird is not uncommon in the reedy marshes of the Savanna, but strangely enough it appears not before to have been recorded from the Bogotá region. While there is little probability of actual intergradation between this new form and exilis proper, it is so obviously a representative of exilis that its relationships and status appear to be more correctly expressed by a trinomial rather than binomial designation.

The Bogotá form shows some approach to the apparently specifically distinct *I. erythromelas* in the richer color of the underparts, but the female is wholly unlike it in the color of the back, which is rich chestnut in *erythromelas*, and clove-brown in *bogotensis*.

Stenopsis cayennensis monticola subsp. nov.

Char. subsp.—Wings and tail longer, the bill larger than in S. c, cayennensis, the female much darker throughout, the crown largely black, the central feathers but narrowly margined with rusty or ochraceous-tawny and grayish; the grayish nuchal area almost wanting, the rusty nuchal collar slightly deeper in color; in the back black predominates, the grayish is reduced to a minimum the feathers being minutely marked with broken rusty; scapulars black widely margined externally with buff or ochraceous as in cayennensis, black tail-bars wider and more pronounced, breast and flanks more heavily barred.

Type.— No. 107747, Am. Mus. Nat. Hist., ♀ ad., San Antonio (alt. 6600 ft.). Western Andes, above Cali, Colombia, Jan. 23, 1911; W. B. Richardson.

Remarks.— Unfortunately none of our four specimens of this race, which may merit the rank of a species, is an adult male. An immature male has the inner web of the outer rectrix white tinged with buffy on the margin and with three small longitudinal black marks near the shaft in the central part of the feather, the second pair of feathers is barred with rusty and black, the third is similarly barred on the outer web but is more solidly black toward the end at the tip of both webs; the inner web, except for the tip, is buffy white with a strong bar of black in the middle reaching nearly across it, the fourth pair resemble the third but lacks the black bar.

I have no males of cayennensis in similar plumage for comparison, but the presence of the black bar on the third pair of feathers indicates that the bird here named is nearer to that species than to Stenopsis albicauda the adult male of which (type, loaned by the Nat. Mus.) has no black bar crossing the white vane of the tail-feathers as in cayennensis.

From the female of S. albicauda, a Costa Rican specimen of which has been loaned by Mr. Todd, monticola differs in being darker above and much deeper buff below. The differences in the plumage of the upperparts are not so striking as those which exist between monticola and cayennensis, the female of the latter being considerably lighter than the female of albicauda, but below, the differences are greater since the underparts of albicauda are paler than those of cayennensis.

The exact relationships of monticola, however, cannot be determined until the adult male has been secured, but its well-defined characters and the fact that it apparently occurs in the Subtropical Zone, while cayennensis has been recorded only from the lower or Tropical Zone, suggests the possibility of the specific distinctness.

Measurements of Females.

•	Wing	Tail	Culmen	Breadth of bill at nostril
San Antonio, W. Col. 9	139	104	12.5	6 mm.
" ф	138	106	13	6
" o'im.	138	112	12	Ó
Maripa, Rio Caura, Ven.	135	100	10	5 . v m tet
<i>" "</i>	134	97	11	.5
Cayenne, F. Guiana o ad.	132	108	11	5.5

Formicarius analis connectens subsp. nov.

Char. subsp.— Most nearly related to F. a. saturatus Ridgw. but cinnamon at the sides of the throat wholly absent or but faintly indicated; upperparts less rufescent, more olivaceous, breast slightly darker, throat patch less sharply defined, size smaller. σ , wing, 86; tail, 52; tarsus, 31.5; culmen, 18.

Type.— No. 121961, Am. Mus. Nat. Hist., & ad., Villavicencio (alt. 1600 ft.), eastern base of Eastern Andes, Colombia, March 12, 1913; T. M. Ring.

Remarks.— This interesting and strongly marked form is based on three males from the type locality, while two females and a male from La Murelia, at the eastern base of the Andes further south, though slightly deeper above obviously belong to the same race. Of true analis I have but one specimen, which, however, being from Bolivia (Yungas) may doubtless be considered typical. It is unsexed, but appears to agree in size with the race here named. From this specimen of analis, connectens differs in color in being decidedly darker, particularly below, where analis is much paler than saturatus. It is, however, the presence of a trace of cinnamon at the sides of the throat in two of our specimens of connectens that suggests its being a connectant between analis and the other northern forms in which this cinnamon marking becomes highly developed. Further characters indicative of the close relationships of these birds are the white loral mark present in our specimen of analis, in all six specimens of connectens and all of our eleven Trinidad specimens of saturatus, and the basally olivaceous or rufescent, apically black tail of analis, connectens and all the northern forms placed by Ridgway (Bull. 50, V, 1911, p. 117) under moniliger. Additional evidence of the intergradation of the Bolivian with the more northern races is supplied by a specimen from Sarayacu, southeastern Ecuador (not "northeastern Peru") which Ridgway refers to as a probable local race of analis and which from his description (Proc. U. S. Nat. M., 1893, p. 674) is evidently between that form and connectens.

It may be added that, in my opinion, Formicarius nigricapillus is specifically distinct from analis; but the relationships of this bird will be discussed in the final report on our Colombian collections.

Craspedoprion pacificus sp. nov.

Craspedoprion æquinoctialis (not of Scl.) Hellm., P. Z. S., 1911, p. 1127 (Nóvita, Noanamá, Col.).

Rhynchocyclus æquinoctialis (not of Scl.) Hart., Nov. Zoöl., 1898, p. 48, (Cachibi, northwest Ecuador).

Char. sp.—Similar to C. olivaceus in size but color brighter above, the margins to wing-coverts and inner wing-feathers deeper, more tawny, the breast much darker, the belly deeper yellow.

Type.— No. 112208, Am. Mus. Nat. Hist., ♂ ad. (testes enlarged), Juntas de Tamaná (alt. 400 ft.), Rio San Juan, Chocó, Western Colombia, Dec. 18, 1911; A. A. Allen and L. E. Miller.

Description of Type.—Above uniform rich olive-green, the loral and auricular regions not perceptibly different, the upper tail-coverts more fuscous and margined with ochraceous; tail fuscous margined externally with olive-green of a browner

shade than that of the back, internally faintly buffy decreasing in amount from without inwardly; wing-quills much blacker than rectrices, all but the outer primary margined with olive-green growing more ochraceous inwardly and apically and becoming ochraceous-tawny on the apical third of the tertials and outer margins of the greater wing-coverts; inner web of all but outer primary buffy, increasing in extent inwardly and becoming cinnamon-buff on the inner feathers; bend of wing greenish yellow; under wing-coverts dusky yellow; throat and upper breast yellowish oil-green; sides and flanks somewhat more dusky, center of belly citron-yellow streaked with oil-green anteriorly and laterally; thighs olive-green; under tail-coverts dusky yellowish, lower mandible whitish-horn, upper, black. Wing, 75; tail, 65; tarsus, 18; culmen, 15; breadth of bill at nostril, 10 mm.

Range. - Humid Tropical Zone of Pacific Coast of Colombia, and Ecuador.

Remarks.— Previous authors have commented on the characters of this species but evidently through lack of material have referred it to C. $\alpha quinoctialis$. Comparison of five specimens from the Pacific coast of Colombia (Juntas de Tamaná, 1; Chocó, 1; Nóvita, 1; Barbacoas, 2) with four specimens from the Caquetá district (La Murelia, 3; Florencia, 1) in the same faunal region as "Napo," the type-locality of $\alpha quinoctialis$, shows the two forms to be specifically distinct. Aside from its much larger size, C. pacificus is brighter green above and brighter yellow below, the throat and chest are darker and more solidly oil-green, and, as has been remarked by the authors quoted, the margins of greater coverts and inner quills are ochraceous-tawny rather than olive-yellow.

The specific distinctness of pacificus is indicated not only by its characters but by its distribution. Like other members of this group it appears to be restricted to the Tropical Zone and hence is widely separated geographically from aquinoctialis, which is unknown west of the Tropical Zone at the eastern base of the Eastern Andes. At the north the range of pacificus is bounded by that of quite a different form to which the name aquinoctialis has also been misapplied and which is described below as C. aquinoctialis flavus.

Panama specimens of this race are much nearer the Caquetá specimens of *æquinoctialis* than they are to specimens of *pacificus* from the upper Atrato and upper San Juan and whether or not they may be representative forms it is reasonably certain that they do not now integrade.

Craspedoprion æquinoctialis flavus subsp. nov.

Craspedoprion æquinoctialis (not of Scl.) Ridgw. (part), Bull. 50, Part IV, U. S. N. M., 1907, p. 387.

Rhynchocyclus æquinoctialis (not of Scl.) Allen, Bull. A. M. N. H., 1900, p. 146 (Onaca, Santa Marta Mts., Col.).

Char. subsp. Similar to C. a. aquinoctialis (Scl.) but larger, the upperparts

brighter, the breast more yellowish, less grayish green, the belly more extensively, and somewhat brighter, yellow.

Type.— No. 70912, Am. Mus. Nat. Hist., o ad., Onaca (alt. 2500 ft.), near coast in Santa Marta Mts., Colombia, Dec. 28, 1898; Mrs. H. H. Smith.

Range.—Caribbean district of South America from Panama to northeastern Venezuela and probably farther south.

Remarks.— Lack of authentic specimens of C. aquinoctialis has evidently led to the erroneous identification of birds from Panama and northern Colombia as that species, whereas when compared with four specimens (La Murelia, 3; Florencia, 1) from near the type-locality ("Napo") of æquinoctialis they are found to differ conspicuously as above indicated. Panama specimens are slightly smaller than two from Onaca, near Santa Marta, and one from Cristobal Colon at the eastern end of the Paria Peninsula, while agreeing in size with the Santa Marta specimens, is slightly darker; it shows, however, no approach to C. guianensis, with which Mr. Todd, who has loaned me four specimens from the Caura and Yuruan in eastern Venezuela, tells me his C. intermedius (Ann. Carn. Mus. VIII, 1912, p. 207) is synonymous.

Craspedoprion guianensis, evidently a northern form of C. olivaceus, resembles C. aquinoctialis in size but is slightly paler below, has the tail browner, the inner margins of the wing-coverts more buffy and outer margins of the greater coverts more ochraceous. It is not improbable that olivaceus and equinoctialis may intergrade, but C. brevirostris of Central America and C. pacificus of the Pacific coast of Colombia and northern Ecuador, appear now to stand as species.

			Measurem	ents.		.: .	
					Wing	Tail	Culmen
C.	æ. æquinoctiali	s, Murelia, Col	., 3 females		65-69	54-58	13-14
"		Florencia "	♂	•	72	61.5	14
"	" flavus	Onaca, "	o ⁷		76	66.5	14
**	u u		♂		74	62	15
"	u u u v	Panama	Ç	100	71	58	14
"	" "	Cristobal Co	lon, Ven. 🗗	. • •	75	66 .	15
C.	pacificus	Juntas de Ta	maná, Col.	o ⁷	74	66	15
"	"	Chocó	"	♂¹	79	69.5	15
"	"	Nóvita	"	Q	72	59	16
"	"	Barbacoas		♂	79	68	15

Euscarthmus septentrionalis sp. nov.

Char. sp.—Similar to Euscarthmus impiger Sel. & Salv. but upperparts much graver, the bill slightly smaller, more subulate, and blackish brown.

Type. No. 122189, Am. Mus. Nat. Hist., & ad., Honda (alt. 600 ft.), Central

Magdalena Valley, Colombia, Feb. 3, 1913; George K. Cherrie.

Description of Type.— Crown brownish olive with a strong grayish tinge, passing without abrupt transition through a slightly more olivaceous color on the back to a distinctly brighter olive-green on the rump and upper tail-coverts; tail fuscous, outer pair of feathers margined externally with grayish, the others with olive-green, which is broader and brighter basally; wing-quills fuscous, the outer primary and inner tertials margined externally with whitish, the others with olive-green the fuscous wing-coverts broadly tipped with yellowish white; bend of the wing and under wing-coverts pale yellow; lores grayish; underparts white, chin and throat and upper breast lightly streaked with grayish, lower breast, particularly at the sides, washed with grayish; sides grayish obsoletely streaked, flanks tinged with greenish; thighs olive-gray; under tail-coverts white with a yellow tinge; legs and feet (in skin) amber brown; bill (in skin) dark chestnut brown, blacker apically, pale below. Wing, 50.5; tail, 41; tarsus, 20; culmen, 12.

Remarks.— In addition to the type we have a second male taken the same day at Honda, which agrees with it, and a specimen (No. 37080) in the Carnegie Museum, loaned me by Mr. Todd, taken by Carriker at Anzoategui, Estado Lara, Venezuela, Feb. 28, obviously belongs to the same species, but is in less worn plumage than the Honda specimens.

Of the bird which I take to be true *impiger*, our collections contain one specimen from Puerto Bello, Venezuela, and consequently near the type locality (= "near Caraccas") and 20 specimens from near Santu Marta, chiefly from Bonda.

From this series the three birds representing septentrionalis differ conspicuously in their blacker and, to a less degree, more rounded bill. This is described in the flesh by Carriker as "blackish brown, horn below," while Phelps describes the bill of the Puerto Cabello specimen as "upper mandible brown, lower, light brown." In comparable, unworn plumage, impiger has the crown and foreback deep buffy brown in strong contrast to the gray tinged brownish olive of septentrionalis.

The specific distinctness of the two birds is indicated by the fact that both apparently belong to the Tropical Zone and that in this zone they occur together as near as Puerto Cabello (sea-level) and Anzoategui (alt. 4750) on the Caribbæan slope, about 100 miles southwest, while septentrionalis evidently ranges from the last-named point at least to the Central Magdalena Valley without change.

Mionectes olivaceus pallidus subsp. nov.

Char. subsp.—In general coloration most nearly resembling M. o. hederaceus Bangs, but with less yellow in the plumage, the back, therefore, bluer green, the breast streaks whiter, the belly paler.

Type.— No. 122204, Am. Mus. Nat. Hist., Q ad., Buena Vista (above Villavicencio, alt. 4500 ft.), March 9, 1913; F. M. Chapman.

Remarks.— This proposed race is based on two specimens for comparison with which I have specimens of all the other described races, including the types of M. o. olivaceus and M. o. venezuelensis. Although geographically nearest the most highly colored forms of the group (venezuelensis and the Santa Martan galbinus), pallidus is, below, the palest of the five subspecies of olivaceus, the breast streaks being whitish, the abdomen sulphuryellow. The upperparts, however, are darker green than any of the other forms, except hederaceus, which it closely resembles in the color of the back, but, as said above, it is here somewhat bluer in tone, while the crown is distinctly darker than the back.

Camptostoma caucæ sp. nov.

Char. sp..— Most nearly resembling C. pusillum, but darker above and paler below, the crown with a sooty cap clearly defined from the grayish olive back; the throat and breast gray, quite unlike the sulphur yellow belly.

Type.— No. 112296, Am. Mus. Nat. Hist., σ ad., Rio Frio, Cauca Valley (alt. 3500 ft.), December 1, 1911; A. A. Allen and L. E. Miller.

Description of Type.— Upperparts dark grayish olive, the rump somewhat lighter, the entire crown sooty, or chætura black, distinctly different from the back; sides of the head grayish, an inconspicuous whitish eye-ring and loral stripe; tail fuscous, the inner feathers narrowly margined with olive-gray, all the feathers narrowly tipped with whitish, which margins also the terminal portion of the inner web of the outer feathers; wings fuscous, the median and greater coverts tipped with buffy and whitish, forming two bars, the under coverts pale yellowish white; throat and breast gray, merging gradually into a sulphur-yellow belly; feet and bill black; the lower mandible brownish. Wing, 54; tail, 44; tarsus, 19; culmen, 8 mm.

Remarks.— This apparently well-marked species is based on three specimens in addition to the type, one from the type-locality and two from Miraflores on the western slope of the Central Andes above Palmira. It seems to be restricted to the Cauca Valley region where it probably represents Camptostoma pusillum, from which, however, it appears to be specifically distinct. A Camptostoma from Chicoral, in the upper Magdalena Valley, almost opposite Rio Frio, has the yellowish throat and breast of pusillum and the crown is but slightly deeper than the back, the upperparts, however, are darker than in any of the races of pusillum and the bird thus shows some approach to C. cauca.

No form of Camptostoma has been reported from the Pacific coast of Colombia south of the Atrato River, but the genus reappears on the coast of Ecuador where is found Camptostoma sclateri, a pale form with a grayish crown, whitish frontlet, pale rump, comparatively long bill with a yellowish lower mandible and a maximum amount of white in the tail. While presumably representing C. pusillum, C. sclateri, of which we have 15 specimens, is evidently specifically distinct from it.

Pitangus sulphuratus caucensis subsp. nov.

Char. subsp.— In the extent of rufous markings most nearly resembling P. s. rufipennis; in general color nearer P. s. sulphuratus.

Type.— No. 108196, Am. Mus. Nat. Hist., Cali, Cauca Valley, Colombia, Dec. 22, 1910; W. B. Richardson.

Remarks.— Eight specimens from the Cauca Valley (Cali to Rio Frio) show this form to be based on constant and well-marked characters. pared with nine specimens from the Caribbæan coast region (Santa Marta, Col., San Antonio, Bermudez, Venezuela) which may be considered typically to represent rufipennis (type-locality "Caraccas"), the Cauca Valley bird is seen to be much darker above, the color of the upperparts and the fuscous areas in the wings and tail being more as in true sulphuratus; there are, however, inconspicuous rufous margins to the feathers which are lacking in true sulphuratus. While nearer rufipennis in the extent of the rufous markings, caucensis shows some return to the sulphuratus type even in this respect, the lesser wing-coverts, and particularly the primary coverts and upper tail-coverts, having much larger fuscous shaft streaks, the rectrices and remiges also usually having less rufous, though the differences here cannot be so definitely expressed. In short, occupying a region in which the humidity more nearly resembles that of Trinidad and the Guianas than it does that of the arid coastal zone of northern South America, the characters of caucensis in a degree parallel the resemblances in climatic conditions existing between the Cauca Valley and northeastern South America.

With the olive-brown backed P. s. derbianus the proposed new form needs no comparison.

Pheugopedius mystacalis amaurogaster subsp. nov.

Char. subsp.— Similar to P. m. mystacalis but darker above, the auriculars more solidly black, the submalar stripe broader, the chin and upper throat white but the lower throat and breast washed with ochraceous-tawny, the flanks and abdomen strong ochraceous-tawny, the tail longer.

Type.— No. 122481, Am. Mus. Nat. Hist., ♂ ad., Buena Vista (above Villavicencio), alt. 4500 feet, Eastern Andes, Colombia, March 4, 1913; George K. Cherrie.

Remarks.— Eight specimens of this strongly marked race were collected at Buena Vista where it occurs, doubtless, as a representative of the Subtropical rather than the Tropical Zone, since we did not find it below this point. From a series of 18 specimens of mystacalis, including two from near the type-locality, this proposed new form differs constantly and conspicuously, as indicated in the diagnosis.

Two specimens of *Pheugopedius* from Anzoategui, Estado Lara, Venezuela, in the Carnegie Museum, loaned me by Mr. Todd and on which he based his *Pheugopedius macrurus connectens* (Ann. Car. Mus., VIII, 1912, 205), appear to be referable to *Pheugopedius mystacalis consobrinus* (Madar.) from Merida (Ann. Mus. Hung., II, 1904, 115). In color these two birds are much nearer true *mystacalis* than they are to *amaurogaster*. From the former they differ only in having the tail somewhat longer, the crown clearer gray, the back duller. One of these birds has a tinge of buff on the throat and breast, the underparts of the other can be exactly matched in color by specimens of *mystacalis*.

We have in our collection an old 'Bogotá' skin which, while somewhat more richly colored than the birds from Buena Vista, apparently represents the form here described, to which a 'Bogotá' bird commented on by Sharpe (Cat. B. M., VI, 1881, 233) also evidently belongs.

Pheugopedius macrurus (Allen), the type of which is before me, is a most puzzling bird. The skin is of Bogotá make but we found no specimens like it in our work in the Bogotá region, which, however, does not, of course, imply that the bird does not occur there. In general coloration this bird exactly resembles Colombian specimens of mystacalis from the Central Andes but the tail differs in color and in pattern from any Pheugopedius known to me and the bird is also much larger than any other of the group.

The tail is more strongly graduated than in birds of the mystacalis group, but there appears to be so much variation in this respect that the difference noted may be individual. In color it is fuscous, the two outer pairs of feathers are externally margined and longitudinally striped with brownish on the outer vane near the shaft, the succeeding two pairs are faintly and irregularly barred on the outer vane and the central bars become more pronounced, but in no instance do they cross the feather. While there is much variation in the tail-markings of mystacalis we have no specimen in which the tail is like that of macrurus. Additional specimens may show the type to be non-typical but in the meantime it seems desirable to recognize Pheugopedius macrurus as a full species. The large size of the bird's wings as well as tail is indicated in the appended table of measurements.

Measurements of Males.

•			Wing	Tail	Tar.	Culmen
P. m. mystacalis	near Huigra,	Ecuador,	63	57	25.5	19
P. m. amaurogaster,	Buena Vista,	Col.	67	65	26	18.5
<i>u u</i>	"	"	65	64	25	18
u u . u	"	"	66	. 68	24.5	19
P. m. consobrinus	Anzoatequi,	Ven.	67	67	25	18
P. macrurus (not sexed)	, 'Bogotá.'		72	72.5	25.5	19

Measurements of Females.

		Wing	Tail	Tar.	\mathbf{Culmen}
P. m. mystacalis	Bucay, Ecuador	61	55	24	18.5
P. m. amaurogaster	Buena Vista, Col.	61	58	25.5	18
	" "	61	58	24.5	18
P. m. consobrinus,	Anzoatequi, Ven.	66	61	24	18

Henicorhina leucophrys brunneiceps subsp. nov.

Char. subsp.— Similar to H. l. guttata of the Bogotá region, but bill longer and heavier, back and wings much brighter, more ferruginous, the crown always browner; markings on outer margins of primaries less distinct, bars on inner wing feathers and on rectrices wanting or obsolete; the tail more rufescent; breast and throat averaging grayer, the latter more streaked with blackish.

Type.— No. 109913, Am. Mus. Nat. Hist., Gallera (alt. 5700 ft.), Western Andes, Colombia, June 27, 1911; W. B. Richardson.

Remarks.— The occurrence of two forms of Henicorhina leucophrys on the western slope of the Western Andes is surprising but is apparently proven by our large series of specimens.

Of leucophrys guttata, agreeing in all essentials with Bogotá birds, we have 65 specimens of which 21 were taken in the Western Andes, all in the Suptropical Zone, while of the proposed new form we have seven specimens, chiefly from the lower border of this zone, from the Nóvita Trail to extreme southwestern Colombia, as follows: Nóvita Trail (4000 ft.), 2; Gallera (5700 ft.), 2; Cocal (6000 ft.), 2; Ricaurte (5000 ft.), 1.

Not one of these seven specimens can be matched in color or in the size of the bill in the series of 65 examples of *guttata*. While the latter species usually has the crown washed with brownish, in not one of our specimens is this character so highly developed as in all the specimens of *brunneiceps*, in which, it is important to note, the crown-feathers are, for the greater part, brown to their bases.

To a certain extent, both in regard to distribution and characters, this case appears to parallel that of *Henicorhina inornata* and *H. prostheleuca eucharis*. In both instances we have two forms apparently representative of each other on the Pacific side of the Western Andes, and although *H. inornata* resembles *H. l. eucharis* in having barred wings and tail, it differs from it much as *brunneiceps* does from *guttata*, in having a brown crown and large bill.

Comparative Measurements of Males of Henicorhina leucophrys.

	\mathbf{Wing}	Tail	Tarsus	Ex. Culmen
H. l. leucophrys (1, Peru)	54	26.5	23	13.5
" "berlepschi" type	53	25.5	23	14
" "guttata (1, Minde, Ecuador)	54.5	28.5	23	14
" " " (5, Fusugasugá)	57	29.9	24.5	13.9
" " (5, San Antonio)	54	28	24	13.5
" "brunneiceps (5, Nóvita				
to Ricaurte)	55.7	27	23.6	16.7

Planesticus caucæ sp. nov.

Char. sp.— Similar to Planesticus olivater (Lafr.), but plumage grayer, less suffused with brownish, male with black of the nape even more sharply defined from the gray of the back; breast grayish its upper part lightly streaked with black, sides of the throat black, the center of the throat and chin streaked with black; female with the crown distinctly darker than the back; the underparts much less brown than in olivater, the throat with but a trace of black shaft-streaks.

Type.— No. 116938, Am. Mus. Nat. Hist., ♂ ad., testes much enlarged. La Sierra, alt. 6300 ft., Central Andes, Cauca, Colombia, March 1, 1912; A. A. Allen and L. E. Miller.

Adult of.— Upperparts olive, more or less tinged with sepia, the entire crown and sides of the head jet black sharply defined from the olive back; wings and tail fuscous, the feathers more or less edged externally with the color of the back; chin white, throat and breast gray, the former with well-defined, the latter with narrow shaft stripes of black; the rest of the underparts grayish wood-brown, more brownish on the flanks; under tail-coverts grayish, narrowly margined with pale wood-brown; under wing-coverts buffy ochraceous; feet brownish; bill bright yellow; upper mandible tipped with blackish. Wing, 119; tail, 94; tarsus, 31; culmen, 23.

Adult 9.— Resembles the male but the head is more fuscous in color, and but little darker than the back; the throat and breast lack the black marks of the male, but show dull fuscous shaft streaks; the abdomen is nore suffused with wood-brown than in the male; bill duller yellow. Wing, 116; tail. 93; tarsus, 30; culmen, 23.

of Immature.—An immature male resembles the adult male but has the back of the head less pronounced and less sharply defined from the back; the throat and breast streaks duller. Wing, 118; tail, 94; tarsus, 31; culmen, 23.

Remarks.— This apparently distinct species is based on four specimens all of which were taken at La Sierra, a locality in the Central Andes, south of Popayan, in heavy forest growth.

Saltator atripennis caniceps subsp. nov.

Char. subsp.— Similar to S. a. atripennis but crown largely gray instead of largely black; exposed portions of inner tertials wholly olive-green, throat and breast with no wash of buffy, under tail-coverts paler, bill averaging heavier and more inflated laterally.

Type.— No. 122733, Am. Mus. Nat. Hist., on ad. ("testes much enlarged"), Fusugasugá, alt. 6000 ft., Eastern Andes, Colombia, March 24, 1913; Paul G. Howes.

Remarks.—A series of 20 specimens of S. a. atripennis from the Subtropical Zone in the Western and Central Andes bordering the Cauca Valley, includes four topotypes from near Popayan (with which the remaining birds in the series agree), which show that true atripennis has the crown wholly black, the inner tertials largely so, the throat with sometimes a faint tinge of buff, and always with a buffy mark at the junction of the white throat and gray breast; the under tail-coverts cinnamon-buff, the maxilla with no marked lateral, bulbous inflation.

Compared with this excellent series, four specimens from Fusugasugá and one 'Bogotá' skin exhibit the characters ascribed to this proposed new form, in which the black of the crown is largely restricted to the forehead and sides of the head, the under tail-coverts are warm buff, the bill shorter and stouter than in atripennis, etc.

Two specimens from Gualea, Ecuador, are to be referred to caniceps and Hellmayr's (P. Z. S., 1911, p. 1120) comments on two Quito specimens of this species having "somewhat shorter, stouter bill, and the crown dark cineraceous, merely mottled with blackish on the forehead and above the white eye-brow," indicate that they represent the Bogotá form rather than that from Popayan when, if this be true, it is not surprising to find that five specimens from Ricaurte (alt. 5000 ft.), a locality in southwestern Colombia on the Ecuadorian line, are intergrades. The bill in these Ricaurte birds agrees with that of caniceps, the color of crown more nearly resembles that of atripennis while the tertials are more like those of caniceps. The buffy throat mark is barely evident in four specimens and absent in one, but the cinnamon-buff under tail-coverts are unquestionably those of atripennis.

The present case furnishes an exception to the rule that the affinities of Ecuadorian forms are with those of the Cauca region rather than with those from Bogotá.

Myospiza cherriei sp. nov.

Char. sp.—Similar to Myospiza manimbe but much paler, the plumage with no chestnut, the crown essentially like the back, the breast with no dusky band, the yellow of head more extensive, encircling the eye and basally crossing the forehead, outer primary shorter, equalling the seventh instead of the sixth (from without); outer tail-feathers shorter; bill more slender, the mandible plumbeous rather than brownish in color.

Type.— No. 122770, Am. Mus. Nat. Hist., ♀ ad., Villavicencio (alt. 1600 ft.), llanos at eastern base of Eastern Andes, Colombia, March 12, 1913; George K. Cherrie.

Description of Type. — General color of the upperparts grayish, the feathers of

the crown and back with black shaft-streaks bordered by Saccardo's umber and margined by smoke-gray; a well-developed lemon-chrome superciliary line passing well behind the eye and continued to the nape in smoke-gray, divided from the grayish auricular region by a narrow line of pale Saccardo's umber; forehead basally yellow; tail fuscous, the outer feathers paler than the central ones, the external margins drab; wing-quills fuscous, the outer primaries narrowly margined, medianly, with whitish and all but the outer one margined basally with pale olive-greenish; the inner secondaries and tertials margined with pale wood-brown; greater wing-coverts pale fuscous margined with grayish, the lesser coverts strongly tinged with yellow, the bend of the wing lemon-yellow; underparts silky white, the sides and flanks with a light grayish wash; feet (in skin) pale brownish; maxilla brownish horn color, mandible and tomia plumbeous. Length (skin), 118; wing, 56; tail, longest feather, 45, shortest 40; tarsus, 20.5; culmen, 6.5; depth at anterior margin of nostril, 5.5 mm.

Remarks.— This species is intermediate between Myospiza manimbe (Licht.) and M. aurifrons (Spix) (= peruviana auct.), in fact, it materially closes the gap between these quite unlike forms. In the general coloration of the upperparts it more nearly resembles manimbe, but in its strongly graduated tail, white underparts, extent of yellow on the head, color and shape of the bill, it appears to be more nearly related to aurifrons. Its wing formula is intermediate in character, the outer primary being shorter than in manimbe and longer than in aurifrons.

In addition to the type we have a specimen, in juvenal plumage, which on comparison with specimens of manimbe and aurifrons in corresponding plumage, admirably supports the characters on which M. cherriei is based. Both were taken in the fields near Villavicencio, at the eastern base of the Andes.

With unusual pleasure I dedicate this well-marked species to its actual discoverer, Mr. George K. Cherrie, not only in recognition of his services to tropical American ornithology, but also in acknowledgment of his efficiency as a field associate.

Arremonops conirostris inexpectata subsp. nov.

Char. subsp.— Similar to A. c. conirostris but wing shorter; in general color of the body resembling conirostris, but breast paler and supraloral stripe whiter, wings and tail more nearly like those of A. c. chrysoma, the shoulder bright lemon-chrome, the wing-quills, including the outer primary, margined externally with yellowish increasing in brightness from within outwardly. Average, three males, wing, 69; tail, 66; one female, wing, 65; tail, 63 mm.

Type.— No. 117120, Am. Mus. Nat. Hist., \circlearrowleft ad. Western slope of Eastern Andes below Andalucia (alt. 3000 ft.), June 6, 1912; L. E. Miller.

Remarks.— In view of the stability shown by Arremonops conirostris conirostris through a wide area, the appearance of this form so near the type-

locality of that race is surprising and inexplicable. Specimens of *conirostris* from Honda at the western base of the Eastern Andes agree minutely in color and size with others from the eastern base of the same range though these areas are separated by three life-zones making actual contact impossible.

Nevertheless within the same river valley, and in the same faunal area this well-marked race, the characters of which are supported by eight adults and five juvenal specimens, occurs. In no other instance have we found birds common to both Honda and the region west of and below Andalucia to differ geographically from one another, and one is led to believe that possibly inexpectata is not strictly a geographical variant of conirostris, or at any rate has had its origin from some other source than the Honda region. The bird's resemblance to chrysoma of western Ecuador should be considered in this connection, and the apparent isolation of the latter form is also of significance. Obviously it will require closer collecting throughout the country occupied by these birds before we may hope to solve their relationships.

Atlapetes fusco-olivasceus sp. nov.

Char. sp.— In the extreme graduation of the tail and dark olive-green color of the back resembling Atlapetes flaviceps Chapm. but differing from that species in being still darker above (approaching in this respect A. crassus Bangs).

Type.— No. 117150, Am. Mus. Nat. Hist., o^{1} ad., testes much enlarged; San Agustin, alt. 5000 ft., Huila, Colombia; L. E. Miller.

Adult & .— Upperparts dark olive green; the crown and sides of the head more blackish and distinctly darker than the back; the rump brighter than the back, the feathers of the loral region basally yellow, the tail strongly graduated, fuscous, narrowly margined with olive green; wings fuscous, the outer margin of the outer primary grayish, the remaining primaries margined with olive green on their basal half, with grayish on the apical half of their outer quills, the inner quills margined externally only with olive; the inner margin of all the wing feathers margined with whitish increasing in extent from without inwardly; underparts rich lemon yellow; the breast to some extent, the sides of the head and flanks strongly washed with olive green. A well-defined, narrow black maxillary stripe; under tail-coverts olive green narrowly margined with olive. Wing, 75; tail, 87, the outer feather 20 millimeters shorter than the longest; tarsus, 23; culmen, 13.

Adult \circ .—Resembles the male, but the grayish outer margins of the primaries are not so evident. Wing, 72; tail, 78; tarsus, 26; culmen, 18.

3 Immature.— Similar to the adult, but less black above, the crown of essentially the same color as the back; in one specimen the black feathers of the adult are beginning to appear in the crown, in another the feathers of the crown and nape are narrowly tipped with yellowish.

Remarks.— This species is based on three specimens from San Agustin, the type locality, and two from La Palma, a nearby locality of heavy forests in the Central Andes, at an altitude of 5500 feet.

Atlapetes pallidinuchus obscurior subsp. nov.

Char. subsp. — Similar to A. p. pallidinuchus, but darker above, dark mouse-gray rather than deep neutral gray; the underparts much more olivaceous, medianly as well as laterally yellowish olive instead of wax-yellow; the rectrices and remiges black instead of fuscous, and without olivaceous margins.

Type.— No. 113269, Am. Mus. Nat. Hist., ♂ ad. Santa Isabel, alt. 12700 ft., Central Andes, Sept. 15, 1911; A. A. Allen and L. E. Miller.

Remarks.— This race has been found only in the Temperate Zone of the Central Andes (Santa Isabel, 7; Laguneta, 2; Almaguer, 4). The characters ascribed to it are shown almost equally well by all the birds in our series, for comparison with which we have six freshly collected, topotypical birds from Fusugasugá.

The olivaceous tone of the underparts (except throat) is particularly marked on the flanks, thighs and under tail-coverts in which the yellow is reduced to a minimum. Above, the differences between the two forms are especially marked on the upper tail-coverts which, in *pallidinuchus*, are, with the back, often washed with olivaceous, whereas in *obscurior* they are nearly black with no trace of olive.

Buarremon sordidus Lawr. (Ann. N. Y. Lyc., X, 1871, p. 138), the type of which is in the American Museum (No. 41062), is a 'Bogotá' skin of Atlapetes p. pallidinuchus in juvenal plumage.

Cœreba mexicana caucæ subsp. nov.

Char. subsp.— Similar to Cæreba mexicana columbiana (Cab.) but slightly smaller, the superciliaries mixed with grayish, sides of the throat, and sometimes its center, finely barred with grayish. Five males: Wing, 56.5; tail, 33.5; five females, wing, 53; tail, 32.

Type.— No. 109240, Am. Mus. Nat. Hist., σ ad. (testes much enlarged), Cali (alt. 3500 ft.), Cauca Valley, Colombia, May 10, 1911; F. M. Chapman and W. B. Richardson.

Remarks.— This unexpected, but apparently quite distinct form is based on eleven adults from the Cauca Valley and Subtropical Zone of the Western Andes, while an immature bird from Miraflores, in the mountains on the eastern side of the Valley, is doubtless also to be referred to it. The unusual characters in adults of this group, of a grayish superciliary line and barred sides of the throat, are present in all our specimens. At first glance these markings suggest immaturity, but the birds showing them are unquestionably fully adult.

Five specimens from Tumaco, Buenavista and Ricaurte agree essentially with six from Esmeraldas, Rio de Oro, Naranjo and Gualea in Western

Ecuador. They are smaller than *columbiana* and average deeper yellow below and more olivaceous on the flanks, but in the color of the upperparts and rump I can distinguish no difference.

Salvadori and Festa (Bull. Mus. Torino, XV, 357, 1899, p. 13) refer birds from western Ecuador to columbiana and describe the bird from south-eastern Ecuador (Zamora, Gualquiza) as Certhiola intermedia. Lowe (Ibis, 1912, p. 502) refers all Ecuador specimens to intermedia including skins from Gualquiza, Zamora, Esmeraldas, etc. In the absence of topotypical specimens of intermedia I can venture no opinion as to which of these views is correct.

A bird recorded by Hellmayr (P. Z. S., 1911, p. 1098) from Pueblo Rico (alt. 5200 ft.) on the western slope of the Western Andes and in the same zone as Lomitas, whence we have two specimens of *caucæ*, may prove to be that form.

Lowe (Ibis, 1912, p. 501) records two specimens of "luteola" from "Juntas" (Western Colombia). If the locality be correct could these not be 'accidental visitants' of gorgonæ from the not distant Gorgona Island?

Cali, 7; Rio Frio, 1; San Antonio, 1; Las Lomitas, 2; Miraflores (?), 1.

Tangara guttata tolimæ subsp. nov.

Char. subsp.—Similar to T. g. eustical Todd, but upperparts darker and less spotted, the yellow of the head more restricted, as in T. g. bogotensis Hellm. & Seil.

Type.— No. 95087, Am. Mus. Nat. Hist., otin ad., about 20 miles west of Honda, Tolima, Colombia, February 20, 1907; Mrs. E. L. Kerr.

Remarks.— This interesting connecting form between T. g. bogotensis and T. g. eusticta of Costa Rica is based on two specimens both from the Central Andes west of Honda.

In the heavy spotting of the throat and breast it agrees with eusticta, of which Mr. W. E. Clyde Todd has loaned me seven Costa Rican specimens; in its green auriculars and subocular region and yellowish green supraloral stripe and orbital ring it agrees with bogotensis; in the color of the back it is fairly intermediate between the two; while in the markings of the back it practically agrees with bogotensis. With the more eastern forms of the group it requires no comparison. Specimens from Ecuador are not available, but if Bonaparte's Calliste guttulata, from Mindos, northwestern Ecuador (Compte Rendu, XXXII, 1851, p. 76) is based on a representative of Tangara guttata his description "et cette couleur jaune teint aussi fortement la tete" applies to the Costa Rica bird rather than to the one here described.

Tangara aurulenta occidentalis subsp. nov.

Char. subsp.—Similar to T. a. aurulenta but underparts more richly colored, approaching raw sienna rather than analine-yellow, under tail-coverts, particularly, deeper; the crown and rump slightly more intense, the margins to the feathers of the back and, especially secondaries and wing-coverts, similar to color of head, and, in adult specimens, without the tinge of green present in aurulenta; the bill averaging longer. .

Type.— No. 108522, Am. Mus. Nat. Hist., ♂ ad., San Antonio, alt. 6600 ft., Cauca, Colombia, Feb. 1, 1911; W. B. Richardson.

Remarks.— The characters above assigned to this proposed new form are well shown by 21 specimens from the Western Andes (Las Lomitas, San Antonio, Cocal, Gallera) when compared with eight specimens from Fusugasugá and El Roble which I assume typically represent T. a. aurulenta (described from 'Bogotá').

Tangara aurulenta goodsoni, recently described from Gualea, Ecuador, by Hartert (Bull. B. O. C., XXXIII, Dec. 23, 1913. p. 78), is intermediate between aurulenta and occidentalis, but is nearer the former. On comparison of the specimens of true aurulenta just mentioned, with nine of goodsoni from Ecuador, including five from Gualea, the type-locality, I can detect practically no difference in the color of the head, rump and underparts; but in the more golden, less greenish tinge of the margins of the feathers of the back and wings, particularly of the greater coverts, and size of the bill, goodsoni is more like occidentalis. The feathers of the back, however, appear to be more widely margined, as a rule, in goodsoni than in either aurulenta or occidentalis, and the back areas, therefore, average smaller in the Ecuadorian than in either of the Colombian forms. From goodsoni as well as from aurulenta, occidentalis may be distinguished by the deeper coloration of the rump, head and underparts, particularly ventral region and under tail-coverts, and from goodsoni by the greater amount of black in the feathers of the back. A specimen from Miraflores in the Central Andes agrees minutely with those from the Western Andes across the Cauca Valley; but six specimens from Ricaurte near the Ecuador boundary, in their paler coloration closely approach goodsoni.

Tangara florida auriceps sp. nov.

Char. subsp.— Similar to T. f. florida Scl. & Salv. but smaller (size of T. f. arcæi), yellow of head of much greater extent, reaching to the forehead; black of loral region and about base of bill wider, scapulars black without, or with but slight greenish borders. o, wing, 65; tail, 40; tarsus, 15; culmen, 9.5. 9, wing, 62; tail, 40; tarsus, 15; culmen, 9.5.

Type.— No. 118247, Am. Mus. Nat. Hist., \circlearrowleft ad., Buenavista, alt. 1200 ft., Dept. Nariño, S. W. Colombia, Sept. 30, 1912; W. B. Richardson.

Remarks.— Of this race we have four adult males, three adult females and one unsexed immature specimen, all from the type-locality. The females may be distinguished from females of arcæi by their usually brighter rump and crown.

An immature female from Nóvita, on the San Juan River, though probably auriceps, cannot with certainty be referred to either form. It indicates, however, the continuous range of this species through the humid Tropical Zone of the Pacific Coast and the consequent intergradation of auriceps with arcæi. Nevertheless, auriceps most nearly resembles in color the form (T. f. florida) from which it is geographically most widely separated.

Chlorospingus flavigularis marginatus subsp. nov.

Char. subsp.—Similar to Chlorospingus flavigularis hypophæus but breast and sides light olive-gray rather than buffy brown, back greener; resembling C. f. flavigularis Scl., but wings and tail shorter, breast and sides browner, flanks more olivaceous, lores grayer, wing-quills margined internally with buff increasing in amount from without inwardly.

Type.— No. 118333, Am. Mus. Nat. Hist., ♂ ad., Buenavista (alt. 1200 ft.), Dept. Nariño, S. W. Colombia, Sept. 27, 1912, W. B. Richardson.

Remarks.— This race is based on comparison of 5 specimens from the type-locality, one from Ricaurte and one from Cocal, with 4 topotypical specimens from Buena Vista and Monteredondo, above Villavicencio in the Bogotá region, and one topotypical specimen of hypophaus. True flavigularis has the underparts, from the throat downward, nearly uniform gray, the sides being little if any darker than the breast, and the centre of the abdomen little if any lighter, the inner margins of the wing-quills essentially of the same color as the inner webs of the feathers, while in marginatus the breast has a faint buffy wash, the sides are brownish, the flanks olivaceous, the center of the abdomen pronouncedly whiter than the rest of the underparts. the wing-quills internally margined with buffy forming a conspicuous border on the webs of the inner feathers. This latter character is also found in C. f. hypophaus of Veragua suggesting, as the distributional facts would also indicate, that marginatus is more nearly related to hypophaus than to flavigularis. It, however, in part bridges the difference between them, and the gap is further filled by three specimens from La Palma and Andalucia at the head of the Magdalena Valley, in which the underparts more nearly approach those of marginatus but the wings agree with those of flavigularis; all have the throat orange instead of canary-yellow, but this feature appears to be either individual or due to age; since it appears also in a bird from

the Bogotá region. It should be added that in specimens having the throat orange, the lores are olive.

'Napo' birds show a suggestion of the fulvous edging to the wing-quills but should evidently be referred to true flavigularis.

It is worthy of note that no form of this group has been recorded from the region between southwestern Colombia and Veragua. The distribution of the group therefore is, in this respect, not unlike that of *Arremonops coni-rostris*.

Measurements.

	Wing	Tail	Culmen
C. f. marginatus, 3 males	73.5	55.5	8.5 mm.
C. f. flavigularis, 3 "	80.3	62	8.3
C. f. hypophæus, 1 "	73	51	8.5
C. f. marginatus 3 females	71	55	8.5
C. f. flavigularis 1 "	76	61	8.5

Ostinops sincipitalis neglectus subsp. nov.

Char. subsp.— Similar to Ostinops sincipitalis sincipitalis, but back more olivaceous and much less brownish; the yellow frontal band narrower, and not continued backward in superciliary stripes.

Type.— No. 123115, Monteredondo, eastern slope of Eastern Andes, alt. 5800 ft., σ ad., March 1, 1913; T. M. Ring.

Remarks. — Our collections show that two forms of this species occur in the Subtropical Zone of the Eastern Andes; one on the eastern slope, and one on the western; they may be easily distinguished in color, the west slope form having the back more heavily washed with brown (varying from Sudan brown in the female to Argus brown in the male, in both margined with olive-yellow), and the yellow of the forehead broader and extending backward in well-defined superciliary lines. Cabanis's name, sincipitalis, is evidently based on this west slope form, to which his description "Er hat gelben Vorderkopf und Superciliarstreifen," clearly applies. Our three specimens of sincipitalis are all from Fusugasugá. Of the form inhabiting the Subtropical Zone of the eastern slope we have in addition to the type, an adult male and female from the eastern slope below Andalucia (5000 ft.) and an adult male from near Merida (alt. 6000 ft.), Venezuela. In the Andalucia specimens the yellow frontlet is reduced to a narrow line. In the Merida example it is wider and more nearly approaches the condition shown by true sincipitalis, but the back is less brown than in that form. status of the Merida bird cannot, however, be determined without further material.

Agelaius icterocephalus bogotensis subsp. nov.

Char. subsp.— Resembling A. i. icterocephalus but larger, the male similarly colored, the female much darker, the head with less yellow, the back less distinctly streaked, the margins to the feathers grayer, less yellow; the flanks and abdominal region much grayer.

Type.— No. 123126, Am. Mus. Nat. Hist., \circ ad., Suba Marshes, Bogotá Savanna, Colombia; February 21, 1913; F. M. Chapman.

Measurements.

				Wing	Tail	Tarsus	Culmen
$\boldsymbol{A}.$	i.	bogotensis 3 1	l	92	73	26.5	20 mm.
"	"	" ç 1		79	65	24	18
A.	i.	icterocephalus	o ^{71 2}	85	67	26	19
"	"	"	Q 3	72	59	23	17.5

Remarks.— It was somewhat surprising to find this Tropical Zone species a common inhabitant of the lagoons on the Bogotá Savanna, and hence in the Temperate Zone, where it is apparently isolated from the ancestral form. A representative series contains seven males and nine females all of which exhibit the characters on which the subspecies is based; the females all being as dark as the immature male of *icterocephalus*, but with less yellow.

Of true icterocephalus, we have twenty-three specimens including seven females and a pair of birds from 'Guiana' which may be considered as typical. It is interesting to discover among our specimens two which are unmistakably icterocephalus icterocephalus though both are labeled 'Bogotá.' Doubtless they were secured in lowlands at the base of the Eastern Andes.

Icterus hondæ sp. nov.

Char. sp.—Wings, tail, throat and capistrum black, unmarked as in *Icterus giraudi*, orange areas as deeply colored as in *Icterus auratus*, with which it agrees in size.

Type.— No. 123163, Am. Mus. Nat. Hist., \circlearrowleft ad., Honda, alt. 600 ft., Magdalena River, Colombia, February 3, 1913; G. M. O'Connell.

Description of Type.— Forehead, lores, cheeks and interior part of auriculars black, sprinkled with a few yellowish feathers of the preceding (immature) plumage; wings black, all but the outer primary narrowly margined externally on the apical half with grayish, the secondaries similarly margined with olive gray; the tertials

¹ Average five specimens.

² Two males, Trinidad and Guiana.

^{*} Two females, East Venezuela and Guiana.

margined with orange; the lesser wing-coverts (narrowly) and under wing-coverts lemon-yellow; tail evenly graduated, black to extreme base from above, slightly yellowish at base of inner vanes from below, the outer pair of feathers with yellow shafts and slightly margined and marked near the shaft with olive-yellow; yellow on shafts decreasing inwardly and appearing only near end of feather; rest of plumage orange, in places cadmium orange; lemon-yellow showing to some extent on the side and scapulars. Wing, 90; tail, middle feather, 92, outer feather, 66; tarsus, 25.5; culmen, 24.

Remarks.— Two males of this Oriole taken at Honda agree closely, and both show enough traces of the preceding plumage to indicate that they are in first nuptial dress. In richness of color both agree with highly plumaged specimens of Icterus auratus, a condition which is not approached by a single example in our series of over 60 specimens of Icterus giraudi taken throughout its range. Nevertheless hondæ is clearly most closely related to giraudi, too closely one might imagine for them both to breed in the same area. It is important to note therefore that while we have found giraudi to be widely distributed in Colombia it is there a bird of the Subtropical Zone which we have rarely found below an altitude of 3000 ft. Consequently if hondæ be a representative of giraudi their apparent distribution in the same area may be explained by their occurrence in different zones, hondæ inhabiting the Tropical, giraudi the Subtropical Zone.

