

Leach for a genus of hymenopterous insects of the family Tenthridinidæ, and subsequently (1856) used by Dr. Giebel for a genus of neuropterous insects. While I am pleased to be able to compliment him upon the discovery that this entomological word "has no connection with the original *habia*," he is mistaken in saying that *Abia* and *Habia* are not the same word in ornithology; for *Abia* is simply a variant of *Habia*, introduced by Agassiz upon a mistaken notion of the etymology and correct form of Azara's name *habia*. If Dr. Stejneger will look in the Index of Gray's 'Handlist', he will find both forms in ornithology. The literal identity of *Abia* Leach and *Abia* Agassiz is simply fortuitous; the former is of Greek origin; the latter is not. I stated the matter correctly, some years ago, in the 'Century Dictionary': see under the words *Abia*, *Habia*, and *Zamelodia*.

PRELIMINARY DESCRIPTIONS OF NEW BIRDS FROM
MEXICO AND GUATEMALA IN THE COLLEC-
TION OF THE UNITED STATES DEPART-
MENT OF AGRICULTURE.

BY E. W. NELSON.

THE present paper is based upon specimens of Mexican and Guatemalan birds obtained mainly by myself and my assistant, Mr. E. A. Goldman, during explorations conducted for the Biological Survey of the U. S. Department of Agriculture during the last five years. In addition to this collection, numbering between four and five thousand specimens, I have had free access to the National Museum series of Tropical American birds for purposes of comparison. In the course of our work we have traversed Mexico from one end to the other, and have crossed the country six times from sea to sea. Specimens were obtained in many districts never before visited by an ornithologist, and although the collections were not exhaustive in any given place, yet the aggregate of series from numerous localities scattered over a large part of the country has afforded a great amount of interesting material.

Mexico covers a wide range of topographic and climatic conditions, from tropical coasts to snowy summits of gigantic volcanoes. The coast lowlands are humid in some parts and very arid in others. Above these rise mountain slopes that are bathed in rain and mist during much of the year; and still beyond are the arid desert table-lands of the interior. As might be supposed, these differences in climate and other physical features result in various well defined life zones and give great variety to the animal and vegetable life. My knowledge of these climatic and topographic features has been of the greatest service in enabling me to define with some accuracy the geographical races herein described. In no instance is a bird described as new unless the differences from its nearest relative are associated with definite changes in the physical surroundings. A detailed study of the country with modern methods will define the life areas of this region, and the corresponding variation of many species into geographical races will be more definitely known.

The present descriptions are merely preliminary to a fuller account that will be given in a future publication.

I have to express my obligation to Dr. C. Hart Merriam, Chief of the Biological Survey, under whose direction the field work was done, for the opportunity to report upon the material obtained. During the preparation of this paper I have had the most cordial assistance from Mr. Robert Ridgway, Curator of the Department of Birds in the National Museum, whose thorough knowledge of North American birds was placed freely at my service, enabling me to do the work in a fraction of the time that otherwise would have been necessary. I am indebted also to Mr. Charles W. Richmond, Assistant Curator of Birds in the National Museum, for assistance in a number of ways.

Throughout this paper the measurements given are in millimeters.

Dendrortyx* *oaxacæ, new species. OAXACA WOODGROUSE.

Type, No. 155565, U. S. Nat. Museum, Dept. Agric. coll., ♂, Totontepec, Oaxaca, Mexico, July 24, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2227).

Distribution.—Mountains of eastern Oaxaca from the Cerro San Felipe, near Oaxaca City, to Mount Zempoaltepec, Oaxaca.

Description of type.—Top of head and nape, including crest, black. The white cheek stripe extending from below eye backward along side of gular black patch, and the white superciliary line, so prominent in the forms of *D. macrourus*, are very indistinct in this bird. The white borders to the feathers also so conspicuous on the back of the neck in that species are absent in *D. oaxacæ*. The feathers of neck, below the black throat patch, and on sides of breast are mostly dark chestnut with very narrow ashy borders along their sides, thus producing an almost uniformly chestnut area. The entire bird is darker than *macrourus* and is characterized by a suppression of the lighter markings seen in that species.

***Dendrortyx macrourus griseipectus*, new subspecies.**

GRAY-BREADED WOODGROUSE.

Type, No. 155560, U. S. Nat. Museum, Dept. Agric. coll., ♂, Huitzilac, Morelos, Mexico, Dec. 30, 1892. Collected by E. W. Nelson (Orig. No. 628).

Distribution.—Heavy oak forest on the Pacific slope of the Cordillera, in the States of Morelos and Mexico.

Description.—Basal half or two thirds of breast feathers with narrow rufous shaft-streaks almost entirely concealed by broad, dingy gray borders of overlapping feathers; general color of breast nearly uniform dingy gray; back, rump, wings and flanks darker and more olive than in *macrourus*; flanks with very indistinct, narrow shaft-lines of rufous; size of *macrourus*.

The type of *Dendrortyx macrourus* was described and figured in Jardine and Selby's 'Illustrated Ornithology' (text to plates 38 and 49) and its range given as 'Mexico'. The description given in the work quoted applies most closely to birds from the mountains about the Valley of Mexico.

The *Tetrao marmorata* of La Llave, from the mountains about the same Valley, is undoubtedly a pure synonym of *macrourus*. Taking birds from these high, pine and fir clad mountains as typical representatives of the species, specimens from other parts of southern Mexico show variations worthy of recognition as geographical races.

***Dendrortyx macrourus striatus*, new subspecies. GUERRERO**

WOODGROUSE.

Type, No. 155567, U. S. Nat. Museum, Dept. Agric. coll., ♀, mountains near Chilpancingo, Guerrero, Mexico, Dec. 24, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2436).

Distribution.—The mixed forest of oaks, pines and firs on the high Cordillera of Guerrero above 8000 feet.

Description.—Rather smaller than the other forms, with a longer, slender beak. The most conspicuous character is the heavy rufous shaft-lines of the feathers along the entire flanks, which do not become obsolete posteriorly as in the others. The back is very dark and the rump and upper tail-coverts lack the mottling of whitish conspicuous in the others. The tail also is darker.

Colinus salvini, new species. SALVIN'S BOB-WHITE.

Type, No. 155503, U. S. Nat. Museum, Dept. Agric. coll., ♂, Tapachula, Chiapas, Mexico, March 10, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3634).

Distribution.—The grassy coast plains between Tapachula and San Benito, Chiapas, Mexico.

Description of male.—Head, neck and fore breast dull black, feathers on back part of crown and nape spotted with whitish and brown along borders; top and sides of shoulders dull rufous, the feathers heavily bordered with dull, dark gray; middle of back, rump and upper tail-coverts blackish, the ends of the feathers with rufous brown mottling and gray edges; wing-coverts with irregular rufous shaft-lines, their sides grayish and brown with white spots along edges; scapulars like back but with conspicuous white spots along borders; primaries and secondaries grayish brown with lighter mottling of fulvous and gray on outer part of secondaries; lower surface of body, below black area on breast, dark rufous, the feathers faintly edged or washed with blackish giving a dingy shade to main color; lower tail-coverts mottled, or coarsely variegated with rufous, blackish and white.

Dimensions.—Wing 100, tail 54, culmen 15, tarsus 29.

Colinus coyolcos is the nearest relative of this bird, but in comparing eleven specimens of each species, including both sexes, it appears to be perfectly distinct.

It is named in honor of Mr. Osbert Salvin, one of the authors of the 'Biologia Centrali-Americana,' which has added so much to our knowledge of Mexican and Central American bird life.

Colinus godmani, new species. GODMAN'S BOB-WHITE.

Type, No. 155493, U. S. Nat. Museum, Dept. Agric. coll., ♂, Jaltipan, Vera Cruz, Mexico, May 2, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3719).

Distribution.—The coast plains about Jaltipan and Minatitlan, Vera Cruz, and thence north to Lake Catemaco, in the same State.

Description of male.—Lores, superciliary stripe, chin, throat and sides of head up to ear-coverts white; a black band from near angle of gape, below eye, running backward over ear-coverts to join black area of neck; forehead and line along each side of crown black; middle of crown and nape blackish with brown and gray edgings to feathers; hind part, sides and lower part of neck, with breast, glossy black; shoulders and fore part of back chestnut, with narrow borders of black and then gray on each feather; lower back, rump and upper tail-coverts blackish, finely marked and mottled with olive, rufous brown and grayish white; the general color much darker than in *C. graysoni*; wing-coverts irregularly marked with black, with white spots on edges of feathers; tertials similar in general color to rump but with distinct white spotting along edges; quills dull brown with ashy borders on outer vanes; secondaries brown, transversely mottled with grayish and buffy on exposed parts; flanks, abdomen and lower tail-coverts light chestnut, with heavy black borders on feathers of flanks and abdomen; these markings producing a broadly streaked pattern; under tail-coverts black spotted; feathers on sides of crissum spotted with white on each vane near tip.

Dimensions.—Wing 100, tail 55, culmen 15, tarsus 29.

This is a very distinct species and one of the most beautiful in the genus. It is based upon five adult specimens and is named in honor of Mr. F. DuCane Godman in recognition of his valuable services to Mexican and Central American ornithology, as joint author with Mr. Salvin of the 'Biologia Centrali-Americana.'

Colinus insignis, new species. GUATEMALAN BOB-WHITE.

Type, No. 155516, U. S. Nat. Museum, Dept. Agric. coll., ♀, Nenton, Guatemala, December 16, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3299).

Distribution.—Guatemala, near Nenton (and Valley of Comitán, in Chiapas, Mexico?).

Description of female.—Forehead, lores and superciliary stripe united in a buffy area; chin and throat of same color; feathers on top of head and nape black, tipped with chestnut, and edged on sides with buffy gray; a black line from angle of gape to ear-coverts; ear-coverts dark brown; feathers on back of neck and fore part of shoulders chestnut, heavily marked along sides with black and white spots and blotches; feathers on back, rump and upper tail-coverts blackish, irregularly barred and marked with dull, whitish gray and brown, and narrowly edged with

whitish which, contrasting with the blackish centres, produces the main pattern of coloration; tertiaries and wing-coverts similarly colored, but bordered with pale fulvous on inner webs; the fulvous borders heaviest on tertiaries; tail slaty gray, with vermiculations of paler gray and brown; quills dull brownish, edged on outer borders with ashy; sides and under part of neck with fore part of breast conspicuously marked with white, black and dull chestnut; sides of breast and flanks dull chestnut, the feathers marked on each side near the tip by a black area succeeded by a white spot; under tail-coverts chestnut with narrow black shaft-lines which broaden near ends of feathers.

Dimensions.—Wing 104, tail 58, culmen 16, tarsus 29.

While in the Valley of Comitán, Chiapas, we were told of the presence there of a species of Bob-white, but saw none during our short stay. At Nenton, in Guatemala, a locality half a day's journey beyond the Valley, we secured a single adult female which is very different from the female of any other known bird of this genus, and as none of the various species taken in the surrounding region show a gradation toward it, I feel justified in giving the new bird specific rank.

***Colinus graysoni nigripectus*, new subspecies. PUEBLA
BOB-WHITE.**

Type, No. 15522, U. S. Nat. Museum, Dept. Agric. coll., ♂, Atlixco, Puebla, Mexico, August 9, 1893. Collected by E. W. Nelson (Orig. No. 1460).

Distribution.—Plains of southern Puebla.

Description.—Contrasted with typical *C. graysoni*, *nigripectus* may be distinguished by its paler shade of rufous both above and below, by the greater width of the black area bordering the white of throat and by its smaller size. The black of the neck extends from the border of the white throat area down over the fore part of the chest and also reaches farther back along the sides of the neck.

Dimensions.—Wing 110, tail 60, culmen 16, tarsus 30.

We found typical *graysoni* ranging south to the northern end of the Valley of Mexico. Thence southeasterly to the City of Puebla none were seen, but when we reached Atlixco the present subspecies was common on the cultivated plain.

This subspecies is based upon five adult specimens.

Cyrtonyx merriami, new species. MERRIAM'S PARTRIDGE.

Type, No. 155543, U. S. Nat. Museum, Dept. Agric. coll., ♂, Mt. Orizaba, Vera Cruz, Mexico, March 21, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 1830).

Distribution.—East slope of Mt. Orizaba, Vera Cruz.

Description.—The general pattern of head markings of *merriami* is much as in *montezumæ*, except that the black chin and throat area extends down to the chestnut on the lower neck and breast with no intervening white collar; the white superciliary band which extends under the black throat patch as a white collar in *montezumæ*, ends on each side of the neck in *merriami*. * Bluish-black auricular patches extend forward on the sides of neck and form a broad junction with the black of the throat. The crown and crest are darker than in *montezumæ*, the light shaft-streaks on the back of the neck and shoulders are buffy whitish, becoming more and more intensely colored posteriorly, until on the longer scapulars and tertiaries they are almost or quite chestnut; the webs of the tertiaries are gray, becoming browner near the tips, and are crossed by several transverse, oblong black spots which are much narrower and more like bars than are the corresponding markings in *montezumæ*; the back and rump are blackish with golden buffy shaft-lines, brown mottling and narrow ashy edgings to the feathers; the upper tail-coverts are ashy with heavy rusty shaft-lines and several transverse black bars on each web of the feathers; the chestnut area of the breast and belly is as in *montezumæ*, but is of a lighter shade; the sides of the breast and flanks are slaty gray, lighter than in the latter species and marked with numerous round white spots about half the size of those in that bird. On the posterior portion of the flanks the white spotting is replaced by spots of buffy and chestnut. The rest of the lower parts are black as in *montezumæ*.

It is named in honor of Dr. C. Hart Merriam, under whose direction our work in Mexico has been done.

This Partridge appears to be closely related to *Odontophorus meleagris* of Wagler (Isis, 1832, p. 277), but differs in having the white spots of the flanks on a background of ashy gray instead of black. Like that species it lacks the white collar on the neck, which in *montezumæ* separates the black of the throat from the chestnut of the breast. Heretofore *meleagris* has been placed as a synonym of *montezumæ*, but the discovery of *C. merriami* with the same general style of markings given for *meleagris*, indicates that the latter is probably a well-marked species which has failed of recognition through lack of material. It was described from Mexico and should take its proper place in ornithological literature.

Megascops marmoratus, new species. MARBLED SCREECH
OWL.

Type, No. 155676, U. S. Nat. Museum, Dept. Agric. coll., ♀, Catemaco, Vera Cruz, Mexico, May 4, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2002).

Distribution.—The only known specimen of this bird was taken in the sparsely wooded country bordering the northern shore of Lake Catemaco, Vera Cruz, at an altitude of about 1200 feet.

In size and general style of color this species is most closely related to *Megascops guatemalensis*, from which it may be distinguished by its generally paler and grayer coloration, and by the finer dark shaft markings, both above and below. The general color of the dorsal surface is light sepia brown, darkest on head and shoulders. The gray and dark brown, or dull fulvous, mottlings on both dorsal and ventral surfaces are much finer than in *guatemalensis*. The legs to toes are thickly barred with white and reddish brown, the latter color being much paler than in the last named species. Toes bare.

From *M. brasiliensis*, as represented in the National Museum collection from various Central American localities, *marmoratus* may be distinguished readily by the absence of the dull yellowish, or fulvous, suffusion which pervades the plumage, just below the surface, in that species.

Momotus mexicanus saturatus, new subspecies. COAST
MOTMOT.

Type, No. 155151, U. S. Nat. Museum, Dept. Agric. coll., ♂, Tehuantepec City, Oaxaca, Mexico, April 29, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2618).

Distribution.—Pacific coast district of Mexico from Mazatlan, Sinaloa to Tonala in Chiapas.

Description.—Contrasted with typical *M. mexicanus* the new form is larger and has the crown deeper rufous; the greens of the back are deeper and more olive; the rufous of the crown and neck extends farther over the shoulders, and the black area of the ear-coverts is more broadly edged with blue. The type measures as follows: Wing 126, tail 200, culmen 44, tarsus 29. A typical male of *mexicanus* measures: Wing 116, tail 170, culmen 39, tarsus 25.

Momotus mexicanus was described from specimens obtained at Temascaltepec in the State of Mexico. Having before me a con-

siderable series of these birds I find that specimens from the hot, dry 'tierra caliente' midway on the mountain slopes draining to the Pacific, from Etzatlan in Jalisco to southern Puebla and adjacent parts of Oaxaca, agree in being smaller and duller colored than those from the more humid districts near the coast, between Mazatlan and Tonalá. The bird of the interior being the typical form, it remains to describe that of the coast region.

Dryobates sanctorum, new species. CHIAPAS WOODPECKER.

Type, No. 154889, U. S. Nat. Museum, Dept. Agric. coll., ♂, Todos Santos, Guatemala, December 30, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3321).

Distribution.—High mountains of Chiapas and Guatemala.

Description.—The lower surface is an intense smoky brown, and the outer tail-feathers have their light areas nearly as dark. The dorsal stripe in most cases is like the ventral surface but is rather more fulvous. The type of *sanctorum* measures as follows: Wing 111, tail 64, culmen 25, tarsus 21. An average male from the region whence came the type of *jardinii* measures: Wing 127, tail 80, culmen 28, tarsus 21.

In the collections made by us in Mexico and Guatemala are two distinct Woodpeckers of the *jardinii* style. One series of eight specimens from the mountains of central Mexico, taken at localities ranging from the State of Michoacan to the mountainous borders of the Valley of Mexico and Mt. Orizaba, Puebla, are typical *jardinii*. South of this region, in the mountains of Oaxaca, these birds become extremely rare. Crossing the Isthmus of Tehuantepec and entering the high mountains of interior Chiapas and Guatemala, a smaller species is found which has hitherto been referred to the central Mexican bird, *jardinii*. Ten specimens before me from Chiapas and Guatemala, are very distinct from *jardinii*, being decidedly smaller and very much darker in color. Specimens in the National Museum from these two regions support the conclusions drawn from our collection.

Antrostomus ridgwayi, new species. RIDGWAY'S WHIP-
POOR-WILL.

Type, No. 154754, U. S. Nat. Museum, Dept. Agric. coll., ♀, Tlalkisala, Guerrero, Mexico, November 29, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2370).

Distribution.—Nothing is known of the range of this species, except that the type was taken in the mountains of interior Guerrero.

Description.—Crown dull grayish with a narrow black median line and fine parallel lines on each side; back, rump and tail, with exposed part of closed wings, gray like the crown and finely maculate with darker; back and rump marked with narrow, dark shaft-lines; scapulars marked with small, roughly triangular black spots bordered with buffy; gray of tail indistinctly and irregularly barred with darker, and feathers tipped narrowly with buffy; chin, throat and sides of head grizzled gray, darker than crown; neck encircled by a golden buffy collar, bordered along front below by a narrow whitish band; breast nearly as dark as throat; abdomen, flanks and lower tail-coverts pale buffy barred with gray and brown, the light color predominating. The type and only known specimen is an adult female.

Size.—Wing 153, tail 116, culmen 18, tarsus 16.

This form is readily distinguishable from any other known Mexican species of the genus by its generally lighter or grayer color and by the conspicuous, pale rufous or golden-buffy collar which completely encircles the neck.

Delattria pringlei, new species. PRINGLE'S HUMMER.

Type, No. 155219, U. S. Nat. Museum, Dept. Agric. coll., ♂, from 15 miles west of Oaxaca City, Oaxaca, Mexico, September 14, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2288).

Distribution.—Mountains of central-western Oaxaca and thence into Guerrero.

Description.—Similar to *henrici* and *margarethæ* in general coloration, but differing in the color of the throat patch, which is royal purple. Using Ridgway's color nomenclature, the three species named above may be distinguished by the following colors of the throat patch.

D. henrici, phlox purple.

D. margarethæ, violet.

D. pringlei, royal purple.

We obtained specimens of *D. henrici* at Mt. Zempoaltepec in eastern Oaxaca. From central Oaxaca to central Guerrero *D. pringlei* was found, and in the interior of the latter State *D. margarethæ* was taken. Thus it appears that the three species occupy contiguous areas. This species is dedicated to the field botanist, Mr. C. G. Pringle, whose work in Mexico is so well known.

Platypsaris aglaiaë sumichrasti, new subspecies.

SUMICHRAST'S BECARD.

Type, No. 154701, U. S. Nat. Museum, Dept. Agric. coll., ♂, Otatitlan, Vera Cruz, Mexico, April 15, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 1926).

Distribution.—The hot coast lowlands of central Vera Cruz and thence southward to Guatemala.

Description.—Adult male with entire top and sides of head and neck, including back to rump, uniform glossy black; rump dark ashy; tail and wings blackish brown. There is a large, dark rose-colored throat patch, and the crissum is dull, dark fulvous. The rest of lower parts are dark slaty, somewhat lighter on the flanks and abdomen. The females, compared with those of *aglaiaë*, may be known by their more intense coloration.

In the 'Revue Zoologique,' 1839, p. 98, Lafresnaye describes *Pachyrhynchus aglaiaë* and gives its habitat as 'Mexico.' He says that it is "above slate color, the nape and rump partly rufescent, pileum entirely black, forehead more grayish."¹ Beneath pale mouse gray, the chin grayer, the foreneck and breast with a broad spot of intense rose color." The rufescence of nape and rump mentioned above are due to the immaturity of his specimen.

In 'The Ibis' for 1859, p. 394 (pl. xiii), Mr. D. G. Elliot describes *Platypsaris affinis*, with habitat in 'Mexico.' He remarks that "This species of *Platypsaris*, to which I have given the name of *affinis*, is closely allied to *Platypsaris aglaiaë* (La Fresnaye), from which, however, it can easily be distinguished by its much smaller bill, and the general lighter color of its plumage, as well as the distinct black head, whereas *there is little or no difference in the adult male of P. aglaiaë, between the color of the head and back. The black of the head and neck [in affinis] is separated from the plumbeous of the back*¹ by a narrow line of ash color; and the ears are tinged with purple. Beneath, this species is much lighter than *P. aglaiaë*, being ashy white." The plate of *affinis* agrees with Mr. Elliot's description and at the same time agrees as closely as could be expected with Lafresnaye's description of *aglaiaë* of which *affinis* is a pure synonym. I take it that Mr. Elliot must have

¹ Italics are mine.

used a wrongly labeled specimen for his comparison in place of referring to the original description.

In Vera Cruz there are two perfectly good subspecies of this bird which were recognized and their proper ranges indicated years ago by Prof. Sumichrast. He states: "I am led to believe that there are two varieties of this bird in the State of Vera Cruz. The one especially found in the hot and temperate regions, of stouter proportions, *and in the adult male at least, with darker plumage,*¹ etc. The other which I have met with several times in the alpine region, is appreciably inferior in size to the preceding, and with lighter tints in the adult male. It is possible that to the latter variety the name of *P. affinis* has been given." Our explorations and the specimens in the collections at hand show that the birds agreeing in every way with the original descriptions of Lafresnaye's *aglaia* and Elliot's *affinis* are the ordinary residents of the tierra templada of Vera Cruz from Mirador, Jalapa, and Jico north to the State of Tamaulipas. The hot, coast lowlands and foothills from Tlacotalpam in Vera Cruz, and Tuxtepec in eastern Oaxaca, south toward Guatemala are inhabited by a very much darker bird which is readily distinguishable.

This new form is dedicated to the memory of Prof. Francis Sumichrast to whose labors we owe so much of our knowledge of Mexican birds.

Empidonax bairdi occidentalis, new subspecies. PLUMA
FLYCATCHER.

Type, No. 154599, U. S. Nat. Museum, Dept. Agric. coll., ♂, (?), Pluma, Oaxaca, Mexico, March 18, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2566).

Distribution.—Heavy forests on Pacific slope of the Sierra Madre in Oaxaca.

Similar to *E. bairdi*, but dorsal surface brighter, clearer green; inside of bend of wings clear yellow in place of fulvous yellow; and under parts brighter or clearer in color.

This new race is a Pacific coast form of *bairdi*, which latter is an east coast species, the type having come from Cordova, Vera Cruz.

¹ Italics are mine.

Picolaptes compressus insignis, new subspecies. BROADLY
STRIPED WOODHEWER.

Type, No. 154647, U. S. Nat. Museum, Dept. Agric. coll., ♂, Otatitlan, Vera Cruz, Mexico, April 15, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 1938).

Distribution.— Lowlands of Vera Cruz.

Similar to *Picolaptes compressus* of Costa Rica, but distinguished by broader white shaft-lines on top of the head, neck and back, and their farther extension down the back. The white markings below are also broader than in ordinary Central American birds. The wings are of about equal length, but the tail of *insignis* is decidedly longer than in true *compressus*.

Automolus pectoralis, new species. OAXACA AUTOMOLUS.

Type, No. 154672, U. S. Nat. Museum, Dept. Agric. coll., ♂, Pluma, Oaxaca, Mexico, March 18, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2571).

Distribution.— Found by us only in the heavy forest of the temperate zone near Pluma, Oaxaca, where they were not numerous.

Description.— Crown, nape, and back to rump, dull tawny brown, a little lighter on forehead; rump rich rufous; tail a little darker shade of same; lores and line under eye with ear-coverts united in a uniformly brown area; breast, throat and sides of neck and extending forward above the ear-coverts to eye a nearly uniform dark rufous brown; chin a slightly paler shade of same; middle of belly dark fulvous in marked contrast to breast; flanks dark, tawny olive; under tail-coverts like breast; exposed parts of folded wings dull rufous.

The uniform color on the top of the head and back, with the generally lighter coloration of the entire bird distinguishes this from other known Mexican and Guatemalan species of this genus. Wing 94, tail 86, culmen 25, tarsus 27.

Otocoris alpestris oaxacæ, new subspecies. OAXACA HORNED
LARK.

Type, No. 145003, U. S. Nat. Museum, Dept. of Agric. coll., ♂, San Mateo del Mar, Oaxaca, May 15, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2700).

Distribution.— Valley of Oaxaca and coast plain immediately bordering the Oaxaca shore of the Gulf of Tehuantepec, from Salina Cruz to the border of Chiapas; ranging from sea level up to about 6000 feet.

Description.—The males of this bird are distinguishable from *chrysolæma* of the southern table-lands of Mexico by the greater extension of the vinaceous coloration on both upper and lower surfaces of the body. It is a lighter and brighter shade of this color than on *chrysolæma* and extends over the crown, nape, sides of neck, shoulders, rump, lesser and middle wing-coverts and sides of chest and flanks. In addition, the greater wing-coverts are more or less broadly bordered with the same. The exposed portion of the feathers of the folded wings as well as the back has the pale brown ground color suffused with a wash of this color, thus shading the entire upper surface behind the black area on the head. This general suffusion of vinaceous affords the readiest means of distinguishing this bird from *chrysolæma*. The yellow on the throat is paler in *oaxacæ* than in *chrysolæma*. The females differ from those of *chrysolæma* by being lighter brown above with a greater suffusion of pale vinaceous on the dorsal surface and along the flanks. The Oaxacan form averages a little smaller than *chrysolæma*.

Unfortunately my series of sixteen adult Oaxacan birds are all in summer plumage and more or less worn. A comparison of well plumaged birds with the fine series of *chrysolæma* would, no doubt, emphasize the differences noted. *Otocoris peregrina* of Bogotá is very similar in coloration to *chrysolæma* of the table-lands of central Mexico. Judging from the two specimens from Bogotá in the U. S. National Museum collection, it is a smaller form than either *oaxacæ* or *chrysolæma*. While on the highlands of Chiapas and Guatemala I looked carefully for Horned Larks but did not see a single individual.

O. alpestris oaxacæ was found breeding rather commonly in the Valley of Oaxaca and also along the salt flats near the sea about San Mateo del Mar. So far as known, its range is limited to parts of the State of Oaxaca. To the north its range meets that of *chrysolæma*. So far as our collections show, none of the several forms of *Otocoris* found in winter along the northern border of Mexico range south to the southern highlands about the Valley of Mexico and Plains of Puebla where true *chrysolæma* abounds.

Calocitta formosa azurea, new subspecies. BLUE-BACKED
CALOCITTA.

Type, No. 144529, U. S. Nat. Museum, Dept. Agric. coll., ♂, Huehuetan, Chiapas, Mexico, February 24, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3559).

Distribution.—The Pacific coast of Chiapas and thence southeasterly through Guatemala and other parts of Central America.

Description.— Back greenish blue with a grayish shade, the blue much lighter or brighter than in true *formosa*. A slightly more intense shade of this color extends over the exposed parts of the folded wings. The top of head, back and sides of neck are richer, brighter blue than the back. The crown feathers are white at base and usually have the distal half blue.

In some specimens a black area is interposed between the basal white and the blue of the tip, but not one of the twenty Central American specimens before me has the crown wholly black on the surface. Of twelve specimens of true *formosa*, six have the crown wholly black and six have the crown black and blue, with the black predominating in several. A black malar patch is present on most of the specimens of *formosa* but is exceptional in *azurea*. Among the latter it is common to find the forehead and basal half of the crest bluish white, which is exceptional in *formosa*. In *azurea* the chin, cheeks and neck down to the black pectoral crescent are white, washed with a light shade of blue that rests on the feathers like a delicate bloom varying in intensity as the bird is turned at different angles in the light. True *formosa* has the back dull grayish blue, the throat and adjoining part of the neck white. The crest of *azurea* appears to be larger than that of *formosa*. In size the two forms are about the same.

Eight specimens of this bird taken by us at Huehuetan, Chiapas, agree with numerous specimens in the National Museum from various Central American localities, in being bluer than those from the Pacific slope of Mexico between Tehuantepec and Colima. In the 'Biologia Centrali-Americana,' Aves, Vol. I, p. 509, the authors call attention to this difference but express the opinion that it is not a constant character. Having before me thirty-four specimens from various parts of Mexico and Central America, I find no difficulty in distinguishing the Central American bird from its Mexican relative.

Cissolopha pulchra, new species. ACAPULCO JAY.

Type, No. 144794, U. S. Nat. Museum, Dept. Agric. coll., ♂, Acapulco, Guerrero, Mexico, January 13, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2481).

Distribution.— Rather common along the coast near Acapulco.

Description.— Head, neck and entire lower part of body black; shoulders, back, rump (with upper tail-coverts) cyanine blue becoming

hyacinth blue in certain lights; exposed parts of folded wings blue with a greenish tinge; tail hyacinth blue; under tail-coverts and lower part of thighs dark Berlin blue; feet and legs brownish, bill black; tail longer and bill slenderer than in *sanblasiana*. The type measures: Wing 147, tail 157, bill 36, tarsus 42. Like *Cissolopha sanblasiana* the forehead has a recurved crest of black feathers.

Comparing the three Acapulco birds with a series of thirteen specimens of *sanblasiana* the shades of blue on the dorsal surfaces do not appear to approach one another, that of each species being well marked and distinctive.

This beautiful Jay although found at the best known seaport of western Mexico appears to have remained undescribed up to the present time.

Agelaius phœniceus grandis, new subspecies. TABLE-LAND
REDWING.

Type, No. 144780, U. S. Nat. Museum, Dept. Agric. coll., ♀, from Atlixco, Puebla, Mexico, July 29, 1893. Collected by E. W. Nelson (Orig. No. 1435).

Distribution.—Southern table-lands of Mexico.

Description.—The coloration of the males does not differ from that of the same sex in the other forms. The female is represented in the collection by specimens in rather worn summer plumage. Compared with specimens of *phœniceus* from the United States in corresponding plumage, the females are darker, with the grayish or fulvous streaking on the lower surface limited mainly to the neck and breast, leaving the flanks plain. They are much darker in every way than the females of *longirostris*, and the restriction of the streaking below distinguishes them from the small Gulf coast bird (*richmondi*).

MEASUREMENTS OF *Agelaius phœniceus grandis*.

U. S. Nat. Mus. No.	Orig. No.	Sex.	Locality.	Date.	Collector.	Wing.	Tail.	Culmen.	Tarsus.
144773	1418	♂	Atlixco, Puebla.	July 27, 1893.	Nels. and Goldm.	142	98	24	32
144774	1424	♂	" "	" 28, "	" " "	144	101	23	32
144777	1430	♂	" "	" 29, "	" " "	159	99	24	32.5
144779	1434	♀	" "	" " "	" " "	114	78	20	29
144780	1435	♀	" "	" " "	" " "	117	78	20	30

The southern table-land region of Mexico is inhabited by a well marked form of Redwing having a range nearly coincident with that of typical *A. gubernator*. Like *gubernator* of this region it is the largest form of the species and has a stouter or heavier bill than the others.

***Agelaius phœniceus richmondi*, new subspecies. RICHMOND'S
REDWING.**

Type, No. 144766, U. S. Nat. Museum, Dept. Agric. coll., ♀, from Tlacotalpam, Vera Cruz, Mexico, April 21, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 1959).

Distribution.—The Gulf coast lowlands of Mexico from near Tampico, south through Yucatan to Nicaragua.

Description.—The males of *richmondi* are colored as in other forms of this species. The females are but slightly marked with lighter on the back. Below on the neck and breast, the fulvous streaks formed by the edgings of the feathers are so broad that they form the main color of that area, the dark shaft markings appearing as narrow streaks. They are much darker than the females of *longirostris* or *bryanti* in general coloration. Both sexes differ from their neighboring forms in small size and in having comparatively long, slender bills.

The National Museum series contains specimens of this form from various localities in Yucatan and on the east coast of Nicaragua. To the north they grade toward the larger northern birds.

MEASUREMENTS OF SEVEN SPECIMENS OF *Agelaius phœniceus richmondi*.

U. S. Nat. Mus. No.	Orig. No.	Sex.	Locality.	Date.	Collector.	Wing.	Tail.	Culmen.	Tarsus.
144763	1963	♂	Tlacotalpam, Vera Cruz.	Apr. 22, 1894.	Nels. and Goldm.	106	77	24	27
144765	1957	♂	Tlacotalpam, Vera Cruz.	" 21, "	" " "	111	87	27	28.5
144764	1964	♂	Tlacotalpam, Vera Cruz.	" 22, "	" " "	109	82	26	29
129784	—	♂	Yucatan.	?	F. Gaumer.	115	83	24	27
126272	3680	♂	San Carlos, Nicaragua.	Feb. 25, 1892.	C. W. Richmond.	105	77	25	28.5
144767	1958	♀	Tlacotalpam. Vera Cruz.	Apr. 21, 1894.	Nels. and Goldm.	91	66	21	24
144766	1959	♀	Tlacotalpam. Vera Cruz.	" " "	" " "	92	67	21	26

I take pleasure in dedicating this form to Mr. Chas. W. Richmond, Assistant Curator of Birds in the National Museum, who obtained specimens of it in Nicaragua.

Agelaius gubernator californicus, new subspecies. CALIFORNIA BICOLORED BLACKBIRD.

Type, No. 74278, U. S. Nat. Museum, ♀ ad., Stockton, California, April 17, 1878. Collected by L. Belding.

Distribution.—Coast region and valleys of California and Oregon north to the Columbia River.

Description of type, in breeding plumage.—The crown and back of neck and shoulders streaked with the grayish and buffy edgings to feathers; primaries, secondaries, tertiaries and wing-coverts edged with whitish; chin and throat fulvous with black shaft-streaks on most of feathers; entire breast and sides of neck streaked coarsely with the fulvous whitish borders to feathers; general color of rest of plumage dull blackish. The males of the two forms agree in coloration. The type measures: Wing 108, tail 75, culmen 19, tarsus 28.

In comparing specimens of this species from the table-lands of Mexico with those from California certain differences are found which warrant the naming of a geographical race. As *A. gubernator* was described from the table-lands of Mexico it follows that the Californian bird is the new one.

The breeding females of typical *gubernator* from the plains of Puebla lack nearly all of the light streaking on the entire upper surface, including the wings, and the light streaks are less marked on the lower surface.

Among other differences from true *gubernator* are the notably smaller size and slenderer bills of the northern birds, as shown by the accompanying tables of measurements. The specimens from Atlixco and Patzcuaro are in worn or imperfect plumage so that the dimensions of their wings and tails fall below the normal. The Californian specimens measured were all in good plumage.

True *gubernator* ranges over all of the southern end of the Mexican table-land north of Oaxaca, and specimens have been examined from Lagos in Jalisco, Guanajuato, Lake Patzcuaro in Michoacan, the Valley of Mexico, the Plains of Puebla, and Orizaba in Vera Cruz. Between the present ranges of these two

forms there is now a broad area several hundred miles across in which neither is known to occur. Two males in the National Museum collection from the Pacific coast of Mexico (one from the State of Colima and the other from Mazatlan) are smaller than table-land specimens in length of wing and tail, and their bills are slenderer, thus approaching the California bird.

MEASUREMENTS OF *Agelaius gubernator californicus* FROM CALIFORNIA.

U. S. Nat. Mus. No.	Orig. No.	Sex.	Locality.	Date.	Collector.	Wing.	Tail.	Culmen.	Tarsus.
139543		♂	Pescadero.	Feb. 21, 1894.	J. E. McLellan.	125	84	20	29
142098		♂	Carbondale.	Mar. 28, "	C. P. Streator.	126	94	22	30
152620		♂	Cahto.	May 4, 1889.	R. C. McGregor.	129	90	24.5	31
152625		♂	"	" 21, "	" "	127	86	23	31
83832		♂	Nicasio.	" 26, 1877.	C. A. Allen.	128	89	22	30

MEASUREMENTS OF *Agelaius gubernator gubernator* FROM THE MEXICAN TABLE-LAND.

U. S. Nat. Mus. No.	Orig. No.	Sex.	Locality.	Date.	Collector.	Wing.	Tail.	Culmen.	Tarsus.
109065		♂	Orizaba.	?	Botteri.	142	97	24	32
71216		♂	Valley of Mexico.	?	?	147	100	23	32
38186		♂	Orizaba.	?	Botteri.	137	91	22.5	32
144772	417	♂	Patzcuaro.	Oct. 17, 1892.	E. W. Nelson.	142	98	22	31
144771	1423	♂	Atlixco.	July 28, 1893.	"	134	97	23	32.5
144784	1425	♀	"	" " "	"	116	79	19	29
144781	1433	♀	"	" 29, "	"	114	82	20	28
147045		♀	Mexico.	?	Boucard.	119	79	19	29

***Ammodramus savannarum obscurus*, new subspecies.**

MINATITLAN SPARROW.

Type, No. 143801, U. S. Nat. Museum, Dept. Agric. coll., ♂, Minatitlan, Vera Cruz, April 21, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3709).

Distribution. — Grassy savannas of the hot lowlands of Vera Cruz, near Minatitlan, and probably elsewhere in suitable situations along the tropical Gulf coast belt to the south.

Description of type. — The dorsal surface is almost wholly black or blackish brown, including the top of the head and the upper tail-coverts. This generally dark coloration is broken by a narrow, pale buffy median stripe on the head and by a small amount of ashy brown, fulvous and dark chestnut edgings to the feathers of the neck, back and rump. The feathers of the top and sides of the neck on birds of the eastern United States are usually dull rufous and ashy, forming a distinctly lighter area than the crown or back, but in the Minatitlan birds this area differs but little in general shade from the color on the rest of the dorsal surface. These neck feathers have black centres with a very slight edging of dark rufous followed by dingy grayish. The scapulars, lower back, and rump feathers are tipped with small spots of dark chestnut. The lower parts, except abdomen, are dark, dingy buffy, lighter on the chin and throat, and darker or more brownish on the flanks; the abdomen is dingy white. The wings and tail are blackish brown edged with lighter shades of brown and gray. The females from this locality, while averaging darker than ordinary birds from the eastern United States, are scarcely distinguishable when compared with very dark specimens from that region.

The specimens from the type locality are the only ones I have seen of this form, but it undoubtedly occurs in suitable situations both to the north and south of that place and probably have nearly the same distribution as *Agelaius p. richmondi*.

While at Minatitlan the last of April, 1896, we found these Sparrows in full song and preparing to nest on the open grassy savannas, often of considerable extent, that are found scattered over the plains of that district. They were rather common, with habits and notes similar to those of their relative of the eastern United States. Their size is also about the same.

***Junco fulvescens*, new species. CHIAPAS JUNCO.**

Type, No. 143906, U. S. Nat. Museum, Dept. Agric. coll., ♂, San Christobal, Chiapas, Mexico. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3079).

Distribution.—Highlands of central Chiapas, Mexico.

Description of type.—Top and sides of head and neck dull ashy gray; back dull rufous with exposed borders of secondaries and tertiaries a brighter shade of same; rump and upper tail-coverts olive brown; chin, throat, middle of breast and abdomen dull white; sides of breast, flanks and under tail-coverts dull, olive-shaded buffy; over two-thirds of outer web and about one-half of inner web of outer tail-feather white; about one-third of inner web of second tail-feather white; general color of undescribed parts of wings and tail light clove brown; lores blackish. Measurements: Wing 77, tail 67, culmen 15, tarsus 23.

The females are smaller and rather duller colored. In winter dress the rufous of the back becomes dark, dull chestnut. In the large size of the beak as well as in other proportions these birds are similar to *alticola*, but the specimens before me show no intergradation in coloration between the two birds.

An examination of a large series of Mexican and Guatemalan Juncos, including specimens of *phaenotus* and *alticola* from the vicinity of the type localities, reveals the interesting fact that a hitherto undescribed species inhabits the highlands of central Chiapas. Sixteen specimens of this bird are now before me. Its range lies adjacent to that of *alticola* but is wholly cut off from that of *phaenotus* by the low country at the Isthmus of Tehuantepec. Nearly all of the adult specimens of *fulvescens* at hand are in worn summer plumage or just entering the fall molt. The type, however, is in fairly well preserved summer plumage.

***Peucaea ruficeps fusca*, new subspecies, BROWN SPARROW.**

Type, No. 135909, U. S. Nat. Museum, Dept. Agric. coll., ♀, from Etzatlan, Jalisco, Mexico, June 18, 1892. Collected by E. W. Nelson (Orig. No. 185).

Distribution.—The southwestern part of the Mexican table-land region, and bordering mountains, in the States of Michoacan and Jalisco. Its range to the north merges into that of *scotti*, and to the east and south-east into that of *boucardi*.

Description.—In the present race the most obvious character lies in the intensity of the browns on the entire dorsal surface and the scantiness of ashy borders to the feathers, thus giving a deep, warm brown color to this area. The dark rufous of the pileum shades gradually into the vandyke brown of the back. The ashy borders of the dorsal feathers, so far

as can be judged by the specimens before me, are narrower and darker than usual in the other forms, thus producing the more uniformly brown appearance. Six specimens before me give the following dimensions.

U. S. Nat. Mus. No.	Orig. No.	Sex.	Locality.	Date.	Collector.	Wing.	Tail.	Culmen.	Tarsus
135909	185	♀	Etzatlan, Jalisco.	June 18, 1892.	E. W. Nelson.	63	58	12	20.5
135911	296	♀	Querendaro, Mich.	Aug. 6, "	"	66	64	14	22
135914	309	♀	Querendaro, Mich.	" 9, "	"	64	61	13	22
135910	192	♂	Etzatlan, Jalisco.	June 23, "	"	63	57.5	13	21.5
135912	306	♂	Querendaro, Mich.	Aug. 8, "	"	67	63	13	22
135913	307	♂	Querendaro, Mich.	" " "	"	67	65	14	22

***Peucæa ruficeps australis*, new subspecies. SOUTHERN SPARROW.**

Type, No. 136131, U. S. Nat. Museum, Dept. Agric. coll., ♀, City of Oaxaca, Oaxaca, June 15, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2104).

Distribution.—That outlying part of the Mexican table-lands occupied by the Valley of Oaxaca, and adjacent mountains up to 6000 or 7000 feet. On the north its range merges into that of *boucardi*, which is common about the Valley of Mexico and on the plains of Puebla.

Description.—Similar to *P. boucardi*, from which it differs in the light rusty-red shade of the rufous on the dorsal surface, the small amount of ashy bordering the feathers of the back, and the more fulvous lower surface.

In general coloration it is much nearer *scotti* of Chihuahua and southern Arizona, but the rufous of *australis* is of a paler or more rusty shade, and it is smaller with a heavier bill. The present form is at once distinguishable from *fusca* (of this paper) by the very much lighter shade of the red or rusty color on the dorsal surface.

The following are the measurements of two specimens of this form.

U. S. Nat. Mus. No.	Orig. No.	Sex.	Locality.	Date.	Collector.	Wing.	Tail.	Culmen.	Tarsus.
136131	2104	♀	City of Oaxaca.	June 15, 1894.	Nels. and Goldm.	61	61	13	21
143925	2601	♀	Totolapa, Oaxaca.	Apr. 20, 1895.	" " "	62	64	14	21

Cardinalis cardinalis littoralis, new subspecies. COAST
CARDINAL.

Type, No. 144301, U. S. Nat. Museum, Dept. Agric. coll., ♂, from Coatzacoalcos, Vera Cruz, Mexico, April 14, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3690).

Distribution.—The moist, hot, coast lowlands of Vera Cruz, near Coatzacoalcos and Minatitlan, and undoubtedly ranging into the adjacent parts of Tabasco.

Description.—The males can be distinguished at once from the other Mexican Cardinals by the intensity of their coloration. With the exception of the black throat patch the entire lower surface, the sides and back of neck and pileum are of a rich poppy red with a wash of carmine. The back including dorsal surface of wings and tail, is intensely rich, dusky red. The capistrum is intensely black and a narrow black band connects the black of the lores across the forehead.

The female is similar in coloration to *yucatanicus*, but the colors are brighter. The black of the capistrum, however, is duller and more of a smoky or dingy shade in the only female seen of the new race.

They are larger and heavier birds than *yucatanicus* and approach more closely in coloration to *saturatus* from Cozumel Island than to any other known form, but are much more intensely colored even than the latter. Specimens of Cardinals obtained at Catemaco and Otatitlan in Vera Cruz, and near Tuxtepec in eastern Oaxaca, are from a district lying between the type locality of *littoralis* and the range of *coccineus*, of the adjacent country to the north, and show a gradation between the two forms.

At Coatzacoalcos they were rather common in the brush-grown sand hills skirting the coast, during April and May, 1896.

Below are the measurements of five specimens of this form :

U. S. Nat. Mus. No.	Orig. No.	Sex.	Locality.	Date.	Collector.	Wing.	Tail.	Culmen.	Tarsus.
144301	3690	♂	Coatzacoalcos.	Apr. 14, 1896.	Nels. and Gold.	92	105	20	26
144302	3682	♂	"	" 13, "	" " "	92	103	19	26.5
144303	3693	♂	"	" 15, "	" " "	85	95	19	25
144305	3714	♂	Minatitlan.	" 22, "	" " "	90	99	19	26
144304	3703	♀	"	" 20, "	" " "	88	98	20	25

Chlorospingus atriceps, new species, BLACK-CROWNED
CHLOROSPINGUS.

Type, No. 143613, U. S. Nat. Museum, Dept. Agric. coll., ♂, Pinabete, Chiapas, Mexico, February 9, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3446).

Distribution.—Heavily wooded mountain slopes of Chiapas, near the Guatemalan border, on the Pacific slope.

Description.—Feathers of pileum and ear-coverts very dark grayish with black tips, giving the surface a blackish shade slightly clouded with grayish; lores very dark grayish; a black band from base of under mandible back to ear-coverts, along lower border of eye; a short, white, post-ocular streak ends above the ear-coverts; sides of neck very dark ashy brown; remainder of dorsal surface, including exposed borders of closed tail and wings, dark oil green; throat dingy white spotted with numerous black tips to feathers; pectoral band light olive green; flanks and under tail-coverts a darker shade of same, nearly equalling color of back; abdomen dingy white; under wing-coverts white. Dimensions: Wing 75, tail 63, culmen 12, tarsus 22.5.

This species is very similar in general appearance to *C. pileatus* of Costa Rica but may be distinguished at once by the absence of the white superciliary line.

Phoenicothera rubicoides affinis, new subspecies. OAXACA
TANAGER.

Type, No. 143571, U. S. Nat. Museum, Dept. Agric. coll., ♂, Pinotepa, Oaxaca, Mexico, February 21, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2538).

Distribution.—Foothills of the coast range on the Pacific slope of Oaxaca, and probably including the same belt in the State of Guerrero.

The males of this form differ from specimens of typical *rubicoides* taken on the east coast of Mexico and in Guatemala, by having the red of the entire body of a lighter or less intense shade, and in the red of the lower parts being more uniform, the contrast between the color of the throat and breast and that of the abdomen and rest of lower parts not being so marked. The female has the crest of a lighter yellow than in birds from the Gulf coast, and the back is a lighter, brighter green. The lower surface is lighter and more inclined to buffy and the throat patch is less marked, thus agreeing with the male in the uniformity of the color on the lower surface.

Birds from the Isthmus of Tehuantepec are intermediate between those from Vera Cruz and those from Pinotepa. The lighter colors of birds from the Pacific coast district of Oaxaca is what might be expected from the fact that the climate is much more arid there than on the Gulf coast where the more intensely colored, typical form is found.

Dendroica goldmani, new species. GOLDMAN'S WARBLER.

Type, No. 143169, U. S. Nat. Museum, Dept. Agric. coll., ♂, Hacienda Chancol, Guatemala, January 4, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3341).

Distribution.—High, wooded slopes of the main Cordillera in western Guatemala.

Description of male.—Chin whitish; a conspicuous white spot just under ear-coverts and bordering yellow throat patch; yellow crown patch bordered behind by a well marked white nuchal spot about one half as large as crown patch; forehead and entire sides and top of head and neck, outside of yellow and white areas, jet black; interscapular region black with gray edges to feathers; rump bluish, blackish gray; upper tail-coverts black; white borders of wing-coverts forming a broad white patch as in

nigrifrons; wings and tail blackish, edged with dull grayish; breast black, flanks and abdomen, back of yellow pectoral spots, white mixed with blackish; under tail-coverts white.

The type is the only specimen obtained of this beautiful bird. It was shot in an old potato field in the forest a little below 10,000 feet. Others were seen and the bird did not appear to be uncommon, but not appreciating its distinctness from *auduboni* at the time, I failed to secure additional specimens.

Its nearest relative is *Dendroica nigrifrons* Brewster, from which, however, it presents various striking differences. It has yellow markings of the same shade and distribution as in *nigrifrons* and *auduboni*.

This species is dedicated to my assistant, Mr. E. A. Goldman, whose services have aided so largely in the formation of the collection upon which the present paper is based.

Basileuterus flavigaster, new species. YELLOW-BELLIED
WARBLER.

Type, No. 143265, U. S. Nat. Museum, Dept. Agric. coll., ♂, Yajalon, Chiapas, Mexico, October 17, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3191).

Distribution. — From Yajalon, Chiapas, to San Andres Tuxtla, Vera Cruz.

Description of type. — Crown rufous, darker than in *rufifrons*, with a faintly marked median line of lighter strongest on the forehead; superciliary stripe white; a white spot just back of and below the ear-coverts on the side of the neck, forming the termination of a grizzled whitish band which extends back along the side of the head, from the chin, and reaches up nearly to the lower eyelid; lores, a narrow line around each side of the eye, and a postocular spot black; cervical collar on the sides and back of the neck, just back of the rufous crown, olive-shaded, ashy-gray; remainder of upper parts including exposed borders of the wing and tail-feathers dark olive green; throat, breast and middle of belly bright yellow, but less intense and slightly washed with buffy on the latter; the sides of the breast and flanks olive green, shaded with buffy posteriorly; the under tail-coverts are buffy. Its size is about the same as *rufifrons*.

This species has the head markings much as in *rufifrons*, with the yellow ventral surface of *delatirii*. Specimens from San Andres Tuxtla, Vera Cruz, are not quite so richly yellow below as the type.

Heleodytes alticolus, new species. MOUNTAIN WREN.

Type, No. 142855, U. S. Nat. Museum, Dept. Agric. coll., ♂, Huitzilac, Morelos, Mexico, December 28, 1892. Collected by E. W. Nelson (Orig. No. 608).

Distribution. — The Pacific slope of the Sierra Madre in the States of Morelos and Mexico from 6000 to 9000 feet.

Description of type. — Crown and forehead grayish brown; back and sides of neck streaked with white and blackish brown; back and rump irregularly barred with white and blackish brown, the feathers being bordered with dull ashy gray slightly shaded with fulvous; two middle tail-feathers with inner webs uniform dark ashy gray; throat and breast white with large, rounded, blackish brown spots; flanks, abdomen and under tail-coverts barred with dingy whitish and blackish brown. Dimensions: Wing 97, tail 89, bill 25, tarsus 27.5.

The following dimensions are of an adult male *megalopterus* from near Jalapa, in Vera Cruz. Wing 90, tail 81, bill 21, tarsus 27.

Mr. Ridgway has had the opportunity of examining Lafresnaye's types in this group and has determined that true *Campylorhynchus pallescens* of that author is a South American species, while the *Campylorhynchus pallescens* of Baird's Review of Am. Birds, I, p. 101, and of the Biologia Cent.-Am., Aves, I, p. 69 is really *Campylorhynchus megalopterus* Lafr., which inhabits the mountain slopes of Vera Cruz.

This clears up the ground in such a way as to leave it quite certain that the specimens of *Heleodytes* obtained by me in the heavy oak forest on the mountain slopes of northern Morelos represent an undescribed species. The specimens from the type locality are the only ones of this bird at hand. It may be distinguished at once from *megalopterus* by its larger size and by the greater clearness of its colors, *alticolus* showing but slight traces of the pale wash of dingy fulvous that obscures the colors of the other.

Alticolus is closely related to *megalopterus*, and I should be inclined to regard them as geographical races of the same species were it not for two considerations: First, my specimens show no signs of intergradation, and second, the ranges of the two forms are isolated from one another by a broad belt of unsuitable country, where neither occurs. Under these circumstances I have no alternative but to treat the two as species until data are at hand to prove them otherwise.

Heleodytes occidentalis, new species. COLIMA WREN.

Type, No. 142863, U. S. Nat. Museum, Dept. Agric. coll., ♂, Sierra Nevada de Colima of Jalisco, Mexico. April 20, 1892. Collected by E. W. Nelson (Orig. No. 102).

Distribution.—Oak forest at the base of the Sierra Nevada de Colima on the border between the states of Colima and Jalisco.

Description.—Compared with typical examples of its nearest relative, *H. jocosus*, this species may be recognized by its reddish brown crown and the brighter markings of the dorsal surface, and also by the obsolescence of the last dark bar on the outer end of the outer tail-feather. The postocular stripe is reddish brown instead of blackish as in *jocosus*, and the flanks and under tail-coverts are marked and shaded with bright fulvous. The ventral surface is less heavily spotted with black, and its bill is proportionately shorter and stouter. The two species are of about the same size.

Heleodytes humilis rufus, new subspecies. GUERRERO
 WREN.

Type, No. 142820, U. S. Nat. Museum, Dept. Agric. coll., ♀, Aguahuitzotla, Guerrero, Mexico, December 28, 1895. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 2456).

Distribution.—Interior of Guerrero along lower slope of the Sierra Madre near Chilpancingo.

Description.—Feathers of forehead and crown black, with borders of dark rufous becoming richer and redder on nape, back and sides of neck. Thence the entire back, including rump and upper tail-coverts, is overlaid with rusty brown a little lighter than the nape. Light markings on exposed part of wing are same shade as back. Chin, throat and ear-coverts white; breast and middle of belly white, washed with pale fulvous; entire flanks and under tail-coverts dull fulvous.

H. humilis rufus differs from *humilis* of the coast districts of western Mexico, of which I have a good series at hand, in the greater intensity of the rufous on the dorsal surface, and in the greatly added intensity of the fulvous wash below.

The differentiation of this form agrees with certain topographic and climatic differences between the localities inhabited by it and those inhabited by the typical one.

***Heleodytes capistratus nigricaudatus*, new subspecies.**

BLACK-TAILED WREN.

Type, No. 142806, U. S. Nat. Museum, Dept. Agric. coll., ♂, San Benito, Chiapas, Mexico, March 11, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3648).

Distribution.—Pacific coast of Chiapas, near Tapachula, and thence into adjacent parts of Guatemala.

Heleodytes capistratus nigricaudatus is very much like *H. capistratus castaneus* Ridgw. in the uniform chestnut coloration of the back, and, indeed, in other respects except the color of the tail. In the present form the two central rectrices are black, or blackish brown, with one and sometimes two subterminal white or whitish bars, the feathers being tipped with a narrow grayish or blackish brown border and lacking the several brownish bars which are conspicuously present in birds from Costa Rica, Nicaragua and Guatemala. In the eleven specimens of *nigricaudatus* before me this character is so constant that, despite the close resemblance of this form to *castaneus* in other particulars I feel justified in recognizing it as a geographical race occupying the extreme north-western border of the range of the species along the Pacific coast.

***Salpinctes obsoletus neglectus*, new subspecies. CHANCOL**

ROCK WREN.

Type, No. 142866, U. S. Nat. Museum, Dept. Agric. coll., ♂, Hacienda Chancol, Guatemala, January 3, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3330).

Distribution.—Highlands of western Guatemala and probably of central Chiapas.

Description.—*Salpinctes o. neglectus* may be distinguished from the Rock Wrens of the western United States and the highlands of northern and central Mexico by its clearer or more ashy gray color, the intensity of the black shaft-lines and white tips of the feathers on the dorsal surface, the black and white markings being quite clearly and sharply defined. The ear-coverts are dark brown, the cheeks are white with blackish brown mottling, and the sides of the neck are brown, variegated with white. The rump is a little deeper fulvous than in *obsoletus* from the Mexican highlands. The tail is also darker than in that bird. The throat is whitish, the breast and sides are mottled with distinct black spots, and the flanks are dull fulvous. Size about the same as typical *obsoletus*.

The type of this form came from the high, cold table-lands about Chancol at an elevation of ten thousand feet. There they were common in the open pine forest. In the lower and warmer district about Nenton, Guatemala, with typical examples of *neglectus*, we obtained two specimens that, while agreeing with the Chancol bird more than with *obsoletus*, show a gradation toward the latter, and this probably continues through Chiapas. Specimens from the plain about Quezaltenango and the adjacent Volcano of Santa Maria are like the Chancol specimens.

Although I have no specimens of *S. guttatus* at hand, the description of that species shows it to be distinct from *neglectus*.

Hylorchilus,¹ new genus.

Type, *Catherpes sumichrasti* LAW. Proc. Acad. Nat. Sci. Phila., 1871, p. 233.

The specimen used in describing the characters of this genus is No. 142878, U. S. Nat. Museum, Dept. Agric. coll., ♂ (?), Motzorong, Vera Cruz, Mexico, March 5, 1894. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 1806).

Generic Characters.—Like *Microcerculus*, this genus is characterized by the plainness of its dark brown plumage, the tail and wings being unmarked, as is most of the body. The secondaries are almost of the same length as the primaries, and the tail is short and spiky in form, being made up of soft slender feathers narrowed gradually at the tip. The tail is so short that it does not reach to the end of the outstretched feet in the dried skin. The body is short and stout, with strong legs and feet as in *Microcerculus*. The bill, however, is more as in *Catherpes*, being long, unnotched at the tip and with similarly narrow, oval, slit-like nares. The bill is heavier and its curve is decidedly less than in *Catherpes mexicanus*, the nares are slightly inclined toward the front instead of being parallel to the gape as in *Catherpes*, and the membrane forming the upper border of the orifice is a little curved and inflated along its edge.

Catherpes sumichrasti was described from a single imperfect specimen taken at Mata Bejuco in Vera Cruz, Mexico. Owing to the absence of the tail in the only known specimen, it has been referred provisionally to the genus *Catherpes* by all subsequent authors. Fortunately we secured two perfect specimens at

¹ ὕλη, forest, and ὄρχιλος, wren, in reference to the habits of the type species.

Motzorongo, in Vera Cruz, in the same region from which came the original specimen, and I am now in position to properly locate the species generically. It forms a distinct type of Wren of generic value and having *Microcerculus* as its nearest ally. Some of its characters indicate a close relationship to *Catherpes* as well, so that its position appears to be that of an intermediate group between those two genera.

The measurements of the two specimens in the collection are given below and show the proportions of the parts. With only the single species to deal with, it is difficult to decide between specific and generic characters, but the distinctive points named will serve until modified by the discovery of other species.

MEASUREMENTS OF *Hylorchilus sumichrasti* (Lawr.).

Sex.	Locality.	Date.	Collector.	Wing.	Tail.	Bill.	Tarsus.
♂ (?)	Motzorongo, Vera Cruz.	Mar. 5, 1894.	Nels. and Goldm.	68	42	32	31
♀	" "	" " "	" " "	65	39	29	27.5

These birds inhabit the gloomiest recesses of the heavy tropical forest, keeping about jutting rocks on steep hillsides, where the forest is so dense that the undergrowth is sparse and the sun scarcely penetrates to the ground. We found them only at an elevation of from about 800 to 1200 feet above sea level on the base of the Cordillera fronting the Gulf of Mexico. They appear to be very local in their distribution, for we searched for them in similar situations elsewhere in eastern Mexico without success.

Hemiura pacifica, new species. PACIFIC WREN.

Type, No. 142935, U. S. Nat. Museum, Dept. Agric. coll., ♂, Manzanillo, Colima, Mexico, February 8, 1896. Collected by E. W. Nelson (Orig. No. 46).

Distribution.—The type and only known specimen of this species was taken at Manzanillo on the west coast of Mexico.

Description.—Compared with *H. leucogastra* and *H. leucogastra brachyura* from the east coast of Mexico this species may be distinguished

by its more rufous dorsal surface, which is entirely of a warm rufous brown. The superciliary line and the rest of the sides of the head are marked as in the other species. The sides of the neck and breast are ashy, and the flanks and under tail-coverts are fulvous brown, brighter than in the other forms. The rest of the lower parts are white. The wings and tail are longer, the bill is about the same.

A specimen of *Hemiura* taken by us at Acapulco is indistinguishable from Yucatan specimens, representing *brachyura*, so the present species is probably not widely spread along the west coast of Mexico.

Henicorhina mexicana, new species. MEXICAN WOOD

WREN.

Type, No. 143007, U. S. Nat. Museum, Dept. Agric. coll., ♂, Jico, Vera Cruz, Mexico, June 24, 1893. Collected by E. W. Nelson (Orig. No. 1272).

Distribution.—Both coasts of Mexico north of the Isthmus of Tehuantepec, in the heavy forests of the mountain slopes of the 'tierra templada.' There are specimens in the collection from the Sierra Madre near Chilpancingo, Guerrero; Mt. Zempoaltepec, Oaxaca, and Jico in Vera Cruz.

Description of type.—Entire top of head, neck and back with upper tail-coverts rusty rufous, a little duller on the head but showing no marked contrast between that and back; exposed parts of folded wings and tail similar to back and crossed by fine blackish bars; lores dark grayish; superciliary stripe white with fine black edgings to feathers; postocular stripe blackish; feathers of ear-coverts and sides of throat and neck with white shaft-lines and black borders, producing a bright black and white striped pattern; chin and throat whitish; breast dark ashy; flanks, abdomen and under tail-coverts dark rufous.

The ashy-breasted Wrens of this genus, in Mexico and Guatemala, have been constantly referred to certain South American species. In Baird's 'Review of American Birds' he gives *Heterorhina griseicollis* as questionably from Guatemala to Mexico. Salvin and Godman in the 'Biologia Centrali-Americana,' Vol. I, p. 80, unite all the Mexican and Central American birds of this style under *Henicorhina leucophrys* Toch. Having a considerable series of these birds before me from numerous Mexican localities, in addition to the U. S. National Museum series from Central America, I find no difficulty in recognizing three distinct forms

north of the Isthmus of Panama. Unfortunately there is no series of specimens at hand to determine the relationship between the birds of Costa Rica and those of South America. Leaving birds from the last two regions out of the question, we have in Guatemala and Chiapas a bird similar in general style and marking to the Costa Rican ones, but readily separable from them, which I recognize as a geographical race of South American *leucophrys*. These birds are found in suitable places from Guatemala to the Isthmus of Tehuantepec. The low country of the Isthmus forms an abrupt cut-off, and beyond that, when the southern end of the Sierra Madre is reached, we find a very distinct bird which occurs along both coasts and which I have recognized as specifically distinct from the others.

The series of eighteen specimens at hand from the two sides of the Isthmus of Tehuantepec, Chiapas and Oaxaca, show no signs of approach to one another, and the young birds in their first plumages are also readily distinguishable.

***Henicorhina leucophrys capitalis*, new subspecies. GRAY-CROWNED WOOD WREN,**

Type, No. 143018, U. S. Nat. Museum, Dept. Agric. coll., ♂, Pinabete, Chiapas, Mexico, February 8, 1896. Collected by E. W. Nelson and E. A. Goldman (Orig. No. 3439).

Distribution.—Heavily wooded mountain slopes in the 'tierra templada' on both sides of Chiapas and thence into adjacent parts of Guatemala.

Description.—A broad band of dark gray extends from the base of the upper mandible back along the top of the head to the fore part of the shoulder and is bordered on each side by a narrower dark line which is black or blackish. The sides of the head and neck as well as the lower parts are very similar to the same parts in *mexicana*. The back and rump are dark rufous in strong contrast to the color on the top of the head and neck, the line of demarcation being very well defined.

Specimens from the Volcan de Fuego, in Guatemala, belong to this race although inclining somewhat toward the birds of Costa Rica. The latter, however, are easily distinguished from *capitalis* by their uniformly dark color on the top of the head and neck, and probably represent another race separable from true *leucophrys*.

Catharus occidentalis fulvescens, new subspecies. TABLE-
LAND THRUSH.

Type, No. 142436, U. S. Nat. Museum, Dept. Agric. coll., ♂, Amecameca, Mexico, February 1, 1893. Collected by E. W. Nelson (Orig. No. 764).

Distribution.—The heavy oak forests of the mountain slopes on the southern end of the Mexican table-lands. Our collection contains specimens from Amecameca, Huitzilac, Ajusco, Volcano of Toluca, El Chico, the Volcano of Orizaba and the Sierra Madre near Chilpancingo, Guerrero.

Catharus occidentalis fulvescens is a form of the table-land mountains and, contrasted with typical *occidentalis*, it is lighter rufous on the crown and the color of the entire dorsal surface is a lighter and more fulvous brown and the ventral surface is much lighter colored. The two forms agree in size. The difference in coloration is quite in line with what would be expected, since the slopes of Mt. Zempoaltepec, whence came the type of *occidentalis*, are very damp and subject to long continued fogs and misty storms. On the other hand the lighter and brighter colored *fulvescens* lives in the drier, clearer climate of the table-lands.

Six birds obtained by us near the type locality agree in being very dark, approaching *C. frantzii* of Central America.

Merula tamaulipensis, new species. TAMAULIPAS ROBIN.

Type, No. 142510, U. S. Nat. Museum, Dept. Agric. coll., ♀, Ciudad, Victoria, Tamaulipas, Mexico, March 27, 1891. Collected by Wm. Lloyd.

Distribution.—The only known specimen was taken near the capital of the State of Tamaulipas.

Description.—Similar to *M. grayi* in size and general characters, but spurious primary broader and more bluntly rounded; entire dorsal surface including top of head and exposed surfaces of folded wings and tail plain, dull, buffy olivaceous, nearly uniform and lacking the deeper buff that gives a warmer tone to the same surface of *grayi*; sides of head and neck like the back; chin and throat whitish, streaked with dark shaft-lines and very faintly washed with pale brownish. This light, streaked, throat area is larger and more marked than in *grayi*. The sides of the breast are olive brown shading into a light pectoral band of the same color which shades insensibly into the very pale buffy whitish of the abdomen. The flanks are more intensely buffy than the abdomen; the

lower tail-coverts are like the belly. The paler, duller color of the lower surface serves to distinguish this species at once from the more richly colored *grayi*.

It is closely related to *M. grayi* which it probably replaces in the region where it occurs. This supposition is based upon the fact that among the considerable series of *grayi* before me from various parts of Mexico not one is from the State of Tamaulipas, while the present species is unrepresented among the considerable series of that bird from the neighboring State of Vera Cruz.

DESCRIPTION OF A NEW SUBSPECIES OF *DENDROICA*.

BY HARRY C. OBERHOLSER.

A RECENT careful examination of the series of Yellow Warblers contained in the United States National Museum has revealed the existence of a well-defined geographical race of *Dendroica aestiva*, which has hitherto been recognized only in synonymy. The subspecies in question should, therefore, now be known as

***Dendroica aestiva rubiginosa* (Pallas), subsp. restit.**

ALASKAN YELLOW WARBLER.

Motacilla rubiginosa PALLAS, Zoogr. Rosso-Asiat. I, (1811?) 1831, 496.¹

CHARS SUBSP. — *D. aestivae morcomi sat similis, sed corpore supra olivaceo-viridi obscuriore fere unicolore, vertice et uropygio vix flavescenti-*

¹ All other of the numerous synonyms of *Dendroica aestiva* apply with reasonable certainty to the eastern form. The bird which Pallas described (*l. c.*) was from Kadiak Island, Alaska, and is fairly well characterized in his diagnosis, the essential portions of which are herewith presented, italicized as in the original:

“*Motacilla rubiginosa*.

M. flavissima, . . . pectori lituris longitudinalibus rufis, rectricibus flavis fusco marginatis. Vibrissae narium et *frons* ad medium usque verticem, lateraque capitis et *subtus* avis tota citreo-flava; frons virescenti nebulosa. . . . Cervix cum *dorso* uropygioque virescit.”