than explain the preoccupation of the big bird in the tree top. While studying the nestling, noting his dark brown eyes, and the lemon yellow of his face-skin and bare legs, I quite forgot his weapons, but, disturbing him a little had such a forcible reminder in the sharp sting of his talons that when I finally loosed them and put him down on the ground, I went away with little fear for his safety, though he had prematurely left the nest.

## Stray Notes from Southern Arizona.

BY F. H. FOWLER.

A LL the original material in the following notes was collected by the author during a four years' residence in Arizona, September 1890, to October 1894. Most of the work was done in the Huachuca and Chiricahua Mountains, and in the San Pedro, Sulphur Springs, and San Simon Valleys, in Cochise County, the extreme southeastern corner of the Territory. A few notes were taken during a trip as far north as Prescott, in the months of May, June and July in 1893.

MASSENA PARTRIDGE. The Massena partridge (Cyrtonyx montezumæ mearnsi) is essentially a bird of the lower pine and oak belts in the mountains of Arizona. Its range north of our borders is quite extensive, reaching as it does from the national boundary between Arizona and Mexico, north to Prescott, east to Taos, New Mexico, and south to the eastern limit in the Bandera Hills north of San Antonio, Texas. Personally I have met with this bird in the Huachuca, Carmelita and White Mountains of Arizona. In the month of July 1891, I saw large flocks of these birds in the open grassy glades among the live oaks on the southern slope of the Huachucas a few miles north of the Mexican line. They were more numerous here than at any other point at which I have observed them, the flocks numbering fully twenty-five birds, doubtless comprising two families. The country was ideal for them as food, water and shelter were close at hand, and natural enemies were few.

The next place I found them was in the Carmelita Mountains, a range of heavily wooded hills extending west from the northern end of the Huachucas. I was out in these hills for a few days in the latter part of March 1892, and found that the Massenas had already paired and were evidently busy hunting up good nesting places. I saw only two pairs, but these showed how different the actions of birds of the same species can be under the same conditions. The first pair I came upon in some open oak brush; both birds walked slowly off—the male uttering a very low, clucking note and both puffing out their derby-like crest. I shot the male at a very close range, and the female flew out of reach with a speed which I think cannot be equalled by any other species of the quail family. The next pair ran a few yards, hid in the grass, and when I pursued them on foot, flew up with an equal speed and disappeared behind a thick grove of trees.

In a canyon about a mile above the post of Fort Huachuca, a female evidently had a nest hidden among some scrub oaks and mescal plants. She was seen at this place at least half a dozen times during the latter part of May 1892, skulking away through the brush, but a careful search failed to reveal the nest. In this canyon also were several small coveys of six or eight each, which could be found along the trail almost any day, and when discovered would usually run swiftly, single file for the brush, where they would scatter to hide.

The last time I saw this feathered beauty was on the North Fork of White River about twenty miles above Fort Apache. I was cutting a fishing pole from some willows on the bank of the stream, which runs through an open pine forest. Suddenly as I stepped on a large bunch of wire-grass, I was startled by a pair that went roaring up from the other side with the usual speed and clucking. From what I have seen, though my observations have not been extensive, I believe that the Mogollons and White Mountains mark their northern range in the territory.

Considering the fact that the bird had been well known for so many years, it seems strange that the first nest was not discovered until 1890 and was not described until Bendire's first volume was published in 1892.

BAND-TAILED PIGEON. The band-tailed pigeon (Columba fasciata) a bird described from a specimen taken at what is now Castle Rock, Colo., cannot be called an Arizona bird proper, but is, I think, found in any of the Arizona mountains where the live oaks or junipers are abundant, as it depends chiefly on these trees for its food, and when not restrained by its nesting cares, wanders over the mountains following the ever changing supply of berries, acorns and juniper buds.

In the Huachucas when the wild mulberries were ripe, they would be found on the east side of the mountains near the centre of the range. When the juniper buds appeared they were more numerous on the west side, in the Carmelita Hills, and when the acorns ripened they scattered over the whole range through the oak woods.

When the breeding season draws near, they betake themselves to sheltered places among the lower mountains, and nest in scattered communities, or as I have seen in several cases, a pair will nest apart from the others. One of the largest breeding communities I noted, was in a little pocket in the mountains, about five miles south of Fort Huachuca; this little place was at the head of a short canyon, and was indeed an ideal spot for birds, as it was well wooded and watered. a flock of about thirty-five pairs of band-tails nested in a scattered rookery, probably not averaging a nest to every three or four acres at the most thickly populated part; and a great majority of the nests were even farther apart than this. The nests in this colony were all placed on the forks of low horizontal limbs of live oaks usually not more than twelve feet up or less than nine, and in no case did I find more than one egg or squab in a nest. The nests were all of that very simple dove-like construction consisting of a few sticks placed on a fork of a branch. Not all of the birds nested at the same time, as fresh eggs and week-old squabs were found on April 16, and two nests containing a fresh egg each were found on May The two cases of pairs nesting outside of colonies, and I do not o in this colony. think these cases are unusual, were, first, a nest found on a low limb of a juniper in the Carmelitas, containing one egg about a week incubated on the 2nd of April 1802, and one in a juniper on a steep hill side above Fort Huachuca.

I believe that the habit of carrying the eggs off in the feathers, or held between the legs, as noted by Mr. O. C. Poling in Bendire's first volume, requires further proof.

COPPERY-TAILED TROGON. The coppery-tailed trogon (*Trogon ambiguus*) is without a doubt one of the rarest birds that reaches our southern borders, and from all present records, it is probable that the center of its abundance within our borders is in the Huachuca and neighboring mountains of Arizona. Lieutenant Benson of the 4th Cavalry shot an immature male in the Huachucas on August 24 1885. Several were seen or collected by Mr. Lusk in 1891 and in the same year

a ranchman living in Ramsay Canyon saw several, the first on May 17, and noted that they were most common during the cherry season.

On June 9, 1892, my father and I accompanied Dr. A. K. Fisher to Garden Canvon seven miles south of the post. We reached the canyon and were riding up the narrow trail bordered with pines and live oaks, when suddenly a beautiful male trogon flew across the path just ahead of us, and perched on a live oak bush on the other side of the small stream which flows through the canyon. tor tried to approach it, but the noise caused by his passage through the thick brush and over the sliding rocks on the hill side alarmed the bird, which from the first had seemed a trifle uneasy, and it was soon lost to view among the trees down the canyon. Higher up, among the pines, on the same day, we heard the calls of another which sounded much like those of a hen turkey. While we were eating lunch on the way down, we heard still another calling from the hill side above us, and the Doctor, who found it perched on the lower limb of a pine after a short search, watched its actions for a few moments and then shot it. It sat erect, the tail hanging straight down, and when uttering the call threw its head back until its beak peak pointed nearly straight up.

On August 14 of the same year I again found the trogon in Garden Canyon, this time higher up however at the Picture Rocks. A beautiful pair flew up from a fallen pine to the lower limb of a tree, and sat there quietly watching me. I dismounted and fired a reduced charge at the male, but the only effect was that he flew off through the trees unhurt, while the female flew up to a small tree on the hill, where she sat, looking at me until I loaded my gun, when I shot her. At the second shot the male flew up the canyon his beautiful carmine breast gleaming in the sunlight like a streak of flame. Both birds sat nearly erect when at rest, with their long tails hanging nearly straight down. Their flight was nearly like the slow flight of a magpie, until started, when they flew like a dove and nearly as fast.

In 1892, Dr. E. A. Mearns, U. S. A., shot an adult female in the San Luis mountains, in southwestern New Mexico. Its tail was much abraded as if the bird had spent a long time in very limited quarters and the breast feathers of the bird I shot were also much worn and soiled. These signs go far to show that both birds had nested recently, and there is no doubt that sometime in the near future a nest of this bird will be found within our borders.

Mexican Black Hawk. During my stay in Arizona, I was not fortunate enough to find the nest of the black hawk (*Urubitinga anthracina*) and in fact, saw but few of them. Near Fort Huachuca there was a pair which bred in 1892. I never saw both at one time, but feel very certain that there were two, by the behavior of the individual I did see. Nearly every day, for a month or more, this large, odd-looking hawk, was seen soaring high over the foot hills back of the post, or hunting diligently in the canyons and gulches above the reservoir. The nearest view I had of him, was one day when I saw him out hunting; he was coming toward me and I concealed myself quickly behind a tree, and just before he came in range he made a swoop, capturing a green-tailed towhee, which was at once carried to the top of an oak stump, where the hawk proceeded to tear the feathers out.

In February, 1894, while hunting antelope on the plains below Fort Bowie, I put one up out of some brush, about two hundred yards in advance, and thinking I might find some cause for his being there, I started toward the place. I had not gone far when another arose, and then another and another, until four went sail-

ing away. I examined the place, but found nothing to account for their presence. At the Natural Bridge near Fort Verde, I saw several nests of this bird in 1893, some of which were old, but several new and containing young. One or two were in cups in the rock of the bridge; the others in giant sycamores; that grew in the narrow canyon. The old Scotchman, Dave Gowan, who owns the bridge, called them "Black Faulcons," and said they had nested there for years. They are much more common in this section, than in the southeast corner of the territory.

## The California Yellow Warbler.

BY JOSEPH GRINNELL.

HE object of the present paper is to recall attention to the California race of the yellow warbler with a view to its being generally recognized in nomen-The fact that skins from certain western localities exhibit peculiarities in size and color is not by any means a new one. That keenest of last-century systematists, Baird, in 1858 noted that "specimens from the Pacific coast appear rather smaller, with less conspicuous streaks than eastern, but no other differences are appreciable." Nearly thirty years later, in 1887, Coale worked over the yellow warblers of North America, with the result that "the western race" was given the name Dendroica æstiva morcomi, typeship being conferred on a skin from Fort Bridger, Wyoming. Shortly after, Ridgway included a description of the subspecies in regular standing in his Manual, where it remained in the last edition. In 1899 the A. O. U. Committee rejected the race, and it has not since been reconsidered. In spite of the A. O. U. Committee's ruling a few independently observant students have since then ventured to recognize the "Western Yellow Warbler," using Coale's name. Ridgway has recently changed his opinion as to the value of the characters assigned in his Manual. For in Part II of his Birds of North and Middle America, he writes in a foot-note: "I am not able to make out satisfactorily a western form (D. a. morcomi Coale). Western specimens seem, as a rule, to have shorter wings and longer tails than eastern examples, and adult males are often much less heavily streaked beneath; but the differences appear much too inconstant to justify recognition of a western subspecies." Finally Brewster, in his Birds of the Cape Region of Lower California, makes the following well-considered observations: "The remaining six birds [from the Cape Region] apparently belong to the form which breeds in California, and which, although usually called æstiva, has been referred by a few writers to morcomi. It differs rather constantly from æstiva of eastern North America in having the chestnut streaks on the under parts narrower and fainter in this respect, showing an approach to sonorana, from which, however, it may be readily distinguished by the decidedly darker, greener coloring of its upper parts. The female is similar to astiva (although less often streaked beneath) and hence quite different from that of sonorana, which is grayish above and clay-colored beneath, with but faint traces of yellowish on the body plumage. On the whole the yellow warbler of California seems to me too nearly like true astiva to be recognized as a distinct subspecies. In any case it should not be called *morcomi*. At least Mr. Ridgway and I agree in considering the type of that supposed form merely an exceptionally faintly streaked specimen of æstiva, of which, moreover, the National Museum possesses a number of perfectly typical