

June 2, on my way home I found two more thrashers' nests. Both had been scenes of violence or disturbance and were deserted. One contained three eggs partly incubated and then dried, while the other had three eggs simply rotten, without any sign of incubation. One nest was in a sage, the other in a grease-wood and both about two feet from the ground. There was no clue to the cause of either catastrophe.

Of the seven new nests found, three had been disturbed and probably the matrons of the last two were killed. I offer no solution as to what was the disturbing element. I did not hear the birds sing at all and they seemed rather retiring in disposition, tho not particularly wild. They left the nest quietly in thrasher-fashion on the opposite side of the bush when I was a few feet distant. In no case except when I caught one of the young that had left the nest did they show any parental concern. In nesting as well as in migrating they seem to have a go-as-you-please gait. During the three days observation I saw incomplete sets of fresh eggs, sets partly incubated, deserted nests and eggs, and young birds grown and partly grown.

Fort Lewis, Colorado.

AN EXPERIENCE WITH THE SOUTH AMERICAN CONDOR

BY SAMUEL ADAMS

WITH PHOTOGRAPHS BY MESSRS. ADAMS AND MARTIN

A COLLECTING party composed of Mr. H. T. Martin of the University of Kansas and myself, then a recent graduate of that school, spent the latter part of 1903 and the early half of 1904 in southern Argentina, the greater part of the time in Patagonia. It has been known as far back as Darwin's time that rich fossil beds exist in this country. The reading of the reports of three fossil-hunting expeditions to Patagonia, made by the late J. B. Hatcher of Princeton, led us to go to this field, where many rare and interesting specimens rewarded the party's efforts.

The pampa, or great central plateau of Patagonia, extends from the foothills of the Andes to the Atlantic coast where it ends by an almost perpendicular fall of three to five hundred feet to the seashore. The waves and currents continually undermine the cliffs and the waters wash away the fragments and debris where they fall below. While prospecting for fossils in these barrancas, as the cliffs are called, near the mouth of the Rio Gallegos (52 S. Lat.) condors were frequently seen flying about the tops of the cliffs and over the plain.

My previous interest in the South American condor (*Sarcorhamphus gryphus*) had been aroused by numerous descriptions which I had read of its marvelous powers of flight, and my first thoughts on seeing the bird in the freedom of its native habitat were to verify the statements of early observers. Time and again I found myself prone on my back intent on this feathered giant as he wheeled and turned in majestic circles and curves without the slightest apparent effort until he disappeared on the horizon or I tired of watching him.

As our camp was moved from time to time to facilitate our work we had a good opportunity to examine the barrancas thoroly and at last encamped near a point about which a pair of condors were seen almost daily, our attention being

called to this particular pair when we first neared the point by their darting toward us with a rush of wings and threatening screams. On the clear cold autumnal morning of March 18, 1904, Martin and I equipped ourselves with firearms and went out to capture the birds. As he neared the edge of the pampa the birds soared out from the cliffs and circling came back toward him. His first shot tipped a wing of the male which wheeled and came down toward the beach where I had stationed myself. The second shot killed the female which fell on the ocean side of a landslide, high above the beach.

At this point the pampa has at some time in the past broken away in one gigantic piece, at least four hundred feet long and about one hundred and fifty feet across the top. The whole lump had slipped downward and outward about two hundred and fifty feet from its original position, leaving a perpendicular wall and wide crack or hollow which was then partially filled with earth and stones worn from the exposed surfaces. It was impossible from the beach to see the edge of



NESTING SITE OF THE SOUTH AMERICAN CONDOR, ON SEA-CLIFF; NOTE THE YOUNG BIRD ON THE NEST-LEDGE TO THE RIGHT

the pampa immediately above on account of the landslide, which towered aloft two hundred and fifty feet; and on the other hand, the slope of the landslide oceanward, as well as the beach, was invisible from the pampa above.

The male tho within two hundred feet of the beach before he saw me below him was able to continue his gliding descent for at least a quarter of a mile up the beach against the wind, and reaching the ground with wings outstretched to gain advantage from the breeze ran with gigantic strides up the hard pebbly shore. In spite of his broken wing he led me a weary chase for more than a mile and a half before I gained sufficiently on him to plant a fatal shot from the little twenty-two I carried, just as he walked into the surf; and in order to finally get my hands on him I was obliged to run into the water to prevent his being washed entirely out of my reach. The female was found on a dangerous slope two hundred feet above the base of the cliff.

On the second day, after preserving the skins, I went up on the pampa to the edge of the cliff where the landslide had occurred and with glasses discovered a young condor on a ledge in the perpendicular wall twenty feet below the edge of the cliff. By means of ropes held at the surface by stakes, with Martin's help, I climbed down to the ledge where the orphaned fledgling as large as a turkey crouched in the most abject loneliness. She showed some fight as I worked my way toward her, but slipping a noose over a foot outstretched threateningly toward me she was easily captured and drawn to the pampa above.

The shelf where the young bird was found was a narrow ledge some fifteen feet in length by three feet in greatest height and width. The nest, if it may be called such, was nothing more than a slight depression of the shelf at its widest and



YOUNG SOUTH AMERICAN CONDOR IN CHARACTERISTIC
ATTITUDE ON NEST-LEDGE

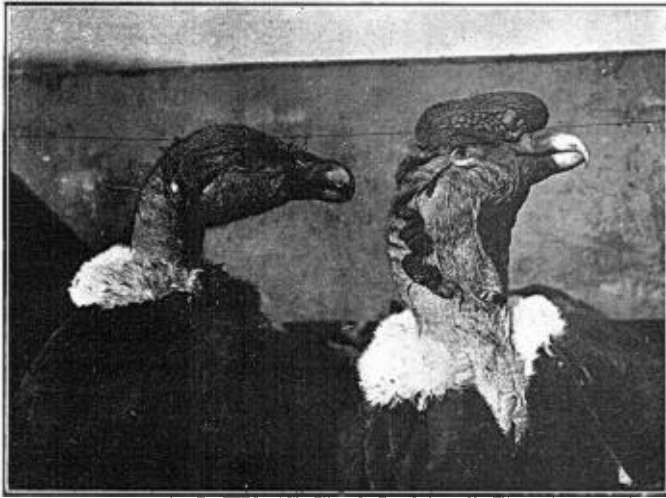
highest part. There was nothing in it but the fine gravel and small fragments of broken fossilshells from the strata out of which the shelf was hollowed. The edge was white with excrement, and the epiphysis of a sheep's limb-bone was the only sign of food. A small shelf just above the nest, in the wall of the cliff, served as a roosting place, and its edge, too, was white-washed.

The heights of the Andes are generally regarded as the home of the condor tho it is frequently seen soaring over the pampa far from the foothills. Within the past twenty years the grassy slopes and valleys along the coast and rivers of Patagonia have been dotted with extensive sheep farms, where sheep are raised for wool alone. Most of these animals die on the pampa of age or exposure and the abundance of food has probably induced the condor to extend its breeding

range to the Atlantic coast where it and the native wild dog are the chief scavengers.

The measurements of our group of birds tally with the average given for the condor, tho it is said that a species inhabiting the heights of Equador has a much larger extent of wings and it may be a larger bird. The male's length was four feet one inch, with an extent of wings of nine feet. The female, the exception in this family of vultures, was smaller than the male, measuring but three feet seven inches in length, with a wing extent of seven feet eleven inches. The young bird (there are said to be usually two) was a female, three feet in length with what seemed unusually large feet. She was clothed in a mouse-colored down with wing pinions and tail feathers just approaching maturity. Her collarette of white had not yet appeared. Judging from the history of the condor, since it is said to spend the first two years of its life in the nest, this young bird must have been at least a year old.

The question of the age of the young specimen is an interesting one, in view of



MALE (AT RIGHT) AND FEMALE SOUTH AMERICAN CONDORS;
PHOTOGRAPHED FROM FRESHLY-KILLED SPECIMENS

the fact that the statement is made in at least one publication that the young condor remains in the nest for nearly two years. Our specimen was taken during the latter part of the first autumnal month in the southern hemisphere. If it was born during that season it could not have been more than four or five months of age. It does not look reasonable that the bird could have been in the nest since the previous warm season. The snow and ice of the winter of 1904 in Patagonia came during the early part of May leaving little time for the maturity of the fledgling preparatory to the weathering of so severe a season since it would still have to depend on its parents for food. From the immature condition of its feathers, tho it was large in body, I am of the opinion that this bird was about four or five months old, and that it would have remained in the nest until the following spring when it would have been able to fly and hunt with its parents, thus leaving the nest in one year. There being but one young bird in the nest would tend also to discredit the accuracy of the statement that there are two eggs deposited in a nest.

Nearly every picture that I took of the young specimen shows her in the act of hissing. The sound was made well back in the throat, like the passage of air thro a moderately large opening, a rather subdued sound, not unlike the sharp hiss made by the human tongue and teeth. The note of the old birds was merely a single menacing cry, perhaps most truly characterized as a scream, uttered as they darted toward us when we approached their nesting place. This cry might be compared to that of the red-tailed hawk so commonly heard in the big timber of the bottom lands of Kansas.

Unfortunately the skin of the male bird spoiled in transit but I still have the skull and wings. The female skin Martin sold to an eastern museum, I understand, while the skin of the youngster is mounted in the museum of the State Normal School at Greeley, Colorado.

Topeka, Kansas.

NESTING WAYS OF THE WESTERN GNATCATCHER

BY HARRIET WILLIAMS MYERS

I HAD always admired him—this dainty little blue-drab bird with his white breast, long black tail with conspicuous white outer shafts, and blue-drab mantle, so, when on the morning of July 9, I came upon him and his mate engaged in household duties, my delight was boundless. We had come up from Los Angeles, my companion and I, for a week's stay in the Little Santa Anita Canyon situated in the Sierra Madre Mountain range.

The first nest of the gnatcatcher (*Poliophtila carulea obscura*) that we found was near the top of a holly bush that had grown so tall that it was more like a tree than a shrub. The nest was in an exposed, upright crotch, and tho overhanging branches sheltered it from the sun the most of the day, not a twig or a leaf obstructed our view of it. It was cup-shaped, being much deeper than broad, and was made of fine gray material that just matched the tree trunk. There were three birds in the nest and we judged them to be somewhat less than a week old.

We stationed ourselves among the tall weeds in a shady spot and the birds, paying not the least attention to us, went on with their feeding, thus enabling us to observe them under natural conditions. Another holly bush grew close by the nest tree, and when we first found the nest and saw that each bird came into this neighboring holly before feeding, we thought it was fear of us on their part that made them do it; but we soon found that this was a regular habit of theirs. In all the hours that I watched at the nest, I never saw them go directly to the young. Even when they came from the nest side they flew past and into this one tree, where they hopped about in it as if in search of food, then usually down onto a bare twig, and from there straight across the several feet of clearing to the nest. It seemed like such a waste of time, but it was their way.

These western gnatcatchers were so much alike that our first thought was whether we would be able to tell the male and female apart. They looked exactly alike except that one bird seemed in better plumage, looking slicker and smoother than the other. However, we had not watched long before we discovered that one of the white tail-feathers of one bird was shorter than the other. It looked as if a new white feather was just coming in, which proved to be the case. It was on the