

THE CAYENNE SWIFT, *PANYPTILA CAYENNENSIS*
(GMELIN).

BY CHARLES W. RICHMOND.

Plate I.

THIS elegant little Swift, although described and figured over a century ago, and ranging over a large portion of tropical America, has always been a scarce bird in collections, while its habits and manner of nesting are as yet very imperfectly known. It was introduced to naturalists as the *Martinet à collier, de Cayenne*¹ by Buffon, who gave a recognizable colored figure of it, and Gmelin in 1788 gave it the name *Hirundo cayennensis*.

This species, which is the type of the genus *Panyptila*, ranges from Nicaragua to southeastern Brazil, and from the fact that it has only recently been found to occur in Central America, north of Panama, it is to be expected that future observations will considerably extend the range. The only other species of the genus is the remarkable *P. sancti-hieronymi*, confined, as far as known, to certain mountains of Guatemala. It is very much larger than the first-named species, but of precisely the same coloration. It, also, is very rare in collections, much more so, in fact, than the Cayenne Swift, due to its inaccessible habitat, and to the meteor-like flight, which renders its collection a matter of extreme difficulty.

References to the Cayenne Swift are few and far between in ornithological literature, and information respecting its life history is very meagre indeed. Messrs. Salvin and Godman in reviewing the species recently in their great work on Central American birds,² wrote: "We have no specimen from our country, but Salvin was shown by Mr. Lawrence in 1874 a specimen with its nest which was found near the Chagres River by Dr. T. K. Merritt, the discoverer of *Microchera albocoronata*. Writing in 1884, Mr. Lawrence says that the bird was captured in its nest,

¹ Planch. Enlum., pl. 725, fig. 2.² Biol. Cent. Am., Aves, II, p. 371.

the latter being a remarkable structure, composed of some kind of silk-weed, and, being probably waterproof, was used by the bird as a domicile in the rainy season. Its shape was like a sleeve, three or four inches in diameter and nine or ten inches long. This nest was, therefore, somewhat similar to that of *P. sancti-hieronymi* but a good deal smaller, and had probably been attached to a rock in a similar way." The nest of the Guatemalan species is described as follows: "The nest of this species is a remarkable structure, made entirely of the downy seeds of some plant; these are glued together, doubtless by the saliva of the bird, so as to form a long bag-like structure with the opening below. The nest itself is near the top of the inverted bag, and the bird on entering the mouth must climb to the top by its feet. The eggs are not known."

Up to 1892 the Cayenne Swift had not been traced north of Panama, but during the summer of this year while collecting birds in eastern Nicaragua I had the good fortune to find the species quite abundant on the Escondido River, at a point about 50 miles from its mouth. At that locality, on the 'I. P.' plantation, three species of Swifts were common, but from its high-flying habits the *Panyptila* was for a time overlooked. It was not long, however, before the presence of a fork-tailed species was detected, owing to its habit of frequently spreading the tail during flight. On June 28, or about a month after I began to shoot at Swifts, my efforts to bring down a specimen were finally successful.

The great difficulty in securing specimens was not due to the rapid flight of the bird, but to the high altitudes at which they ordinarily passed the time. In fair weather it was utterly impossible to shoot any species of Swift, but on cloudy afternoons or just before dusk, following long rainy spells, all three species would frequently descend within range of our guns. Even under the most propitious conditions for shooting Swifts, it was no easy task to recover the dead birds; those falling in the river were liable to be devoured by voracious fishes, or if dropping elsewhere than on the small grass plot in front of the house were almost certain to be lost in the heavy grass and weeds which grew everywhere. Wounded birds falling some distance away were invariably lost. After many trials, at favorable times between May and October, and an expenditure of about three

hundred cartridges, I was the possessor of nine Cayenne Swifts and about a dozen of the two species of *Chaetura*.

From the little information available, and from my own experience, it would seem that this Swift is rather local in its distribution, a colony of the birds being found in one locality and none at all a few miles distant. Mr. Chapman found them to be common at La Brea in Trinidad¹ but observed none at other localities on that island. The 'I. P.' plantation was the only place in Nicaragua where I noticed them, and none were seen on the Rio Frio in Costa Rica, although a large assemblage of other species was found late one afternoon on that river.

These birds pass the day executing their gyrations high in the air, often considerably above the other species, at times, however, freely associating with them. They work over a considerable area in search of food, usually in loose flocks. One moment many Swifts will be over head, a little later none are to be seen except at the opposite end of the plantation or across the river. In a short time — ten minutes or so — they are back again, and the manœuvre is repeated. Thus while shooting Swifts, we will have many opportunities to bring down birds for a short time, followed by an intermission in which to look for lost ones. In my case the intermission was usually passed in marveling over my inability to shoot specimens with cartridges which had been soaked for a week or more in salt water.

In ordinary flight the tail is closed, and the bird cannot easily be distinguished from the spiny-tailed species, but individuals often pause in their evolutions and soar for a brief interval at which time the tail is widely spread.

The note usually uttered by this Swift is a pleasing, rather long-drawn *chee* or *chee-ee*, at other times a *chee-wee-wee-wee*, given in a shrill pitch. Wounded birds have a squeaky, clicking note, several times repeated.

Although the birds were so numerous, the thought of finding a nest did not occur to me. Nests of many of the tropical birds are so well concealed, so carefully protected from the invasions of snakes, ants, monkeys, and other animals, and the vegetation is so very dense that one has little chance of finding them except

¹ Bull. Am. Mus. Nat. Hist., VI., 58.

by mere accident. It was, then, quite a surprise to meet with a nest during one of my daily collecting trips. Early in the morning of August 23, while returning from a short tramp, I had almost reached the edge of the forest, when my attention was drawn to a mixed company of birds feeding in an immense tree which stood directly in my path. Among the birds were Montezuma Yellow-tails, two species of Toucans, and some small Parrots. Wounding a Yellow-tail, I was endeavoring to keep it in sight, when a small bird dashed in from an opening in the forest and with an upward sweep disappeared on the trunk of the tree at a point about 70 feet from the ground. Its movements were so sudden and unexpected that by the time I realized just where the bird had disappeared, it had entered its nest, a peculiar structure eight or nine inches long, which was attached to the under surface of the trunk, and so nearly resembled it in its smooth grayish appearance that under other circumstances it would have escaped notice. When first observed, the nest was still quivering from the ingress of the bird, proving it to be of a soft yielding nature. It was attached to the trunk, probably by the saliva of the bird, but this point could not be definitely learned.

It was of almost exactly the same color as the bark; the entrance, at the bottom, was very large, nearly the diameter of the nest at the lower part, which appeared to be about three inches, with a slight bulging at the upper end.

On shooting at the nest there was a struggle inside, which shook it considerably, and presently the bird appeared at the entrance and fell to the ground. To my astonishment, it was a Cayenne Swift, and on dissection proved to be a male. There were no indications that the bird was nesting, and the probabilities are that it was simply using the nest as a place of refuge during rainy weather.

On visiting the place next day with a pair of field glasses, I could determine little concerning the composition of the nest, except that it had the appearance of being stuccoed with some material resembling the bark in color.

The plate accompanying this number of 'The Auk' gives a very life-like figure of the bird and its nest, although the bird in flight, as above mentioned, spreads its tail only at irregular intervals.