## DESCRIPTION OF RALLUS JOUYI, WITH REMARKS ON RALLUS STRIATUS AND RALLUS GULARIS.

## By LEONHARD STEJNEGER.

Rallus striatus is said to occur from India throughout Burmah, Cochin China, Malacca, Sumatra, Java, Southern China, the Philippine Islands, and Formosa. But it seems that several species or subspecies have been lumped together under this name. The type of R. striatus came from the Philippines, and Brisson described it as having "the lower part of the hind neck, back and scapulars of a blackish brown, each feather being marked on both sides with transverse whitish spots" (Ornith., V, 1760, p. 168). A specimen in the National Museum (No. 77009), said to have come from the Philippine Islands, agrees very minutely with his full and excellent description, and I, therefore, take it to be the typical R. striatus.

Two specimens before me (U. S. Nat. Mus., Nos. 15427, 95823), one obtained by Peale in "Malacca," the other by Dr. Cantor in Penang, may be regarded as nearly typical *R. gularis* Horsf., which was originally described from Java.

The other specimens in our museum (Nos. 85751, 85752) differ considerably from the foregoing ones, as will be shown further on, and as they were obtained by Mr. P. L. Jony, whose excellent collections from China and Japan have added so much to our knowledge of the ornithology of these countries, I take great pleasure in calling this unnamed species Rallus jouyi or Hypotænidia jouyi.

Rallus striatus Linn. (S. N., 12 ed., 1766, I, p. 262) has the upper surface blackish brown with small, but very distinct white dots, which on the wings extend transversely into sharply-defined white bars, while in the other two forms the color of the back is more or less olive; the rufous on the upper head and neck is deeper, nearly chestnut, and in the middle, from the bill down to the back, washed so strongly with dusky that it blends nearly imperceptibly with the blackish brown of the back, while the outer edges of the chestnut portion form a brighter band running from the supraloral region over the eyes and down along the sides of the neck, ill-defined above, but sharply contrasting with the gray of the sides of the head and neck. Lores, cheeks, fore neck and breast gray, darker than in the allied forms, and slightly washed with olivaceous. Entire abdomen and the tibiæ very distinctly barred with whitish and dusky, the flanks similarly barred, the dusky bars, however, being darker, nearly blackish, and broader. The primary coverts are uniform without white bars or spots, while the other upper wing coverts are distinctly barred with white.

Rallus gularis Horsf. (Tr. Linn. Soc., XIII, 1822, p. 196), if the Malaccan specimens do not differ from those found in Java, is of about

the same size as the foregoing species. The color of the back is somewhat lighter, in No. 15427; also more olivaceous, and the white markings form narrow transverse bars across the feathers. The chestnut color of the hind neck is brighter, contrasting strongly with the back. Underneath the gray color is lighter, and the entire abdomen and the tibial feathers are uniformly whitish without bars. The primary coverts are distinctly barred with white like the rest of the upper wing coverts.

Rallus jouyi sp. nov. (& ad. type U. S. Nat Mus., No. 85751) is a much larger bird than any of the foregoing species. The coloration of the back is a slightly grayish olive; each feather having an ill-defined dusky spot in the middle, which, however, is only visible externally in the interscapular region, and two or three pairs of transverse white spots bordered anteriorly and posteriorly by blackish; the color of the back extends on the hind neck nearly as far as the occiput, bordered on both sides by a bright rusty chestnut band, which forms a continuation of the color of the pileum and occiput. Chin and throat white; lores, subocular, and auricular regions, fore neck and upper breast clear bluish gray; sides of breast, flanks, and lower part of the breast with broad white dusky-bordered cross-bars on a ground color which is olive on the sides, gradually becoming grayer towards the middle of the breast; entire abdomen, crissum, under tail-coverts, and tibiæ, distinctly barred with white and dusky gray, narrower than on the flanks and breast. Wings above olive like the back, and with white cross-bands like those of the flanks but more distant; primary coverts with two pairs of transverse white spots; wings underneath, including axillaries, dusky with narrow white cross-bars. Tail colored like the wings. Bill (in the dried skin) orange red, grayish white at tip beyond the nasal groove; feet horny brown.

The female ( ad. U. S. Nat. Mus., No. 85752) is quite similar to the male, but the olive of the back is washed with brownish instead of gray; the breast, flanks, and tibiæ are barred as in the male, but the abdomen is nearly uniform whitish.

Habitat.—The two specimens described above are from Shanghai, China. Whether the Indian bird really belongs here I cannot say, but I suspect it does, since Jerdon (B. of Ind., III, p. 726) describes it as having "the upper plumage olivaceous throughout, with narrow white, black-edged bars, and his measurements agree pretty well with mine. If such be the case, this is Reichenbach's Rallus indicus (Vollst. Naturg., Novit. Rasor., pl. cecxxii, figs. 2575, 2576 (1851), a name which two years previous was applied by Blyth to the Indian form of Water Rail. I may quote, however, a remark by Mr. Swinhoe (Ibis, 1863, p. 427): "The hind necks of the Formosan birds, as well as of species from Siam, are bright chestnut. This color scarcely shows at all in birds that I have seen from India; but specimens may vary in this respect, and I have seen no large series."

The following table may facilitate the better understanding of the characters of the three forms, as shown in the specimens before me:

The difference in size between *striatus* and *gularis*, on one side, and *jouyi*, on the other, is shown by the following

## Measurements.

## 1. RALLUS STRIATUS.

U.S. Nat. Mus.	Collector and number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed cul- men.	Tarsus.	Middle toe, with claw.
77009		ad.	Philippines	***********	mm. 117	$\frac{mm.}{37}$	10m. 36	ит. 37	mm.
2. RALLUS GULARIS.									
95823 15427	Dr. Cantor Peale	ad.	Penang Malacea		112 117	39 37	35 35	37	40
3. RALLUS JOUYI.									
85751 85752	Jouy, 72	♂ad. ♀ad.	Shanghaido	July 5, 1881 May 8, 1881	133 132	51 50	44 41	46 45	47 48