

p. 308<sup>3</sup>; Salv. P. Z. S. 1870, p. 199<sup>4</sup>; Baird, Brew., & Ridgw. N. Am. B. ii. p. 363<sup>6</sup>; Ridgw. Ibis, 1886, p. 467<sup>6</sup>; Scl. Cat. Birds Brit. Mus. xiv. p. 231<sup>7</sup>.

*Empidonax viridescens*, Ridgw. Pr. U. S. Nat. Mus. vi. p. 413<sup>8</sup>.

Quam præcedentes pectore multo magis ochraceo.

*Hab.* COSTA RICA, Barranca<sup>1 2</sup>, Dota Mountains, Grecia<sup>2</sup> (*Carmirol*), Quebrada Honda (*v. Frantzius*<sup>2</sup>), Irazu (*H. Rogers*); PANAMA, Volcan de Chiriqui<sup>4</sup>, Calovevora<sup>4</sup> (*Arcé*).

This species seems fairly separable from the more northern *E. salvini* and *E. bairdi*, the most obvious character being the ochraceous tint on the chest. In some specimens the head and back are of a browner olive, but this is an evanescent character. Upon the specimens with the more olivaceous upper plumage Mr. Ridgway founded his *E. viridescens*, but with a typical specimen of *E. flavescens* before us, and others compared with the type of *E. viridescens*, we do not see how two Costa-Rican species can be established—some allowance must be made for age, season, &c.

b. *Rostrum angustulum*.

10. *Empidonax hammondi*.

*Tyrannula hammondi*, Xantus de Vesey, Pr. Ac. Phil. 1858, p. 117<sup>1</sup>.

*Empidonax hammondi*, Baird, B. N. Am. p. 199, t. 76. f. 1<sup>2</sup>; Coues, Pr. Ac. Phil. 1866, p. 52<sup>3</sup>; Birds N. W. p. 257<sup>4</sup>; Key N. Am. B. ed. 2, p. 443<sup>5</sup>; Sumichrast, Mem. Bost. Soc. N. H. i. p. 557<sup>6</sup>; Baird, Brew., & Ridgw. N. Am. B. ii. p. 383<sup>7</sup>; Henshaw, U. S. Geogr. Surv. West 100th Mer. v. p. 362<sup>8</sup>; Lawr. Bull. U. S. Nat. Mus. no. 4, p. 27<sup>9</sup>; Ridgw. Ibis, 1886, p. 467<sup>10</sup>; Man. N. Am. B. p. 344<sup>11</sup>; Scl. Cat. Birds Brit. Mus. xiv. p. 232<sup>12</sup>.

*E. obscuro* similis et forsan haud distinguendus, caudæ rectrice utrinque extima pogoniis ambobus fere unicoloribus. Long. tota 5·2, alæ 2·8, caudæ 2·3, tarsi 0·65, rostri a rictu 0·55. (Descr. exempl. ex Orizaba, Mexico. Mus. nostr.)

*Hab.* WESTERN NORTH AMERICA, from the Lesser Slave Lake southwards<sup>11</sup>.—MEXICO, Sierra de Valparaiso in Zacatecas (*Richardson*), State of Vera Cruz (*Sumichrast*<sup>6</sup>), Orizaba (*F. D. G.*), Gineta Mountains (*Sumichrast*<sup>9</sup>); GUATEMALA, Calderas 7500 feet, Pine-forest of Volcan de Fuego, between 10,000 and 12,000 feet (*O. S. & F. D. G.*).

We are not at all sure that skins of this bird can always be distinguished from *E. obscurus*, the point chiefly relied upon lies in the colour of the outer web of the outermost tail-feather on either side, which in *E. hammondi* hardly differs from the inner web, but in *E. obscurus* is always whitish; moreover, *E. hammondi* is usually a smaller bird than *E. obscurus*. We find, however, small birds with the outer web of the tail-feather paler than the inner, so that it becomes very difficult to determine accurately every individual. *E. hammondi* has the long narrow bill of this section of *Empidonax*, so that we have little doubt that it is with *E. obscurus* that it should be compared, and this is the opinion of both Dr. Coues and Mr. Ridgway, though Mr. Henshaw considered that its affinity is with *E. minimus*<sup>8</sup>.