

also admits that he has examined pterylographically that peculiar swift *Callocalia*, together with a number of others.

He then states that "the posterior cervical apterium, so conspicuous in the hummingbirds, is present in every swift I have examined." He adds that "Dr. Shufeldt says it is *never* present in the swifts," to which I would reply that so far as I am aware Professor Clark and Mr. Lucas are the only ones who have ever found it there. He states in his article that Professor Thompson failed to find it in the swift *Callocalia*, to which I would further invite his attention to the fact that Nitzsch, the greatest known authority on the pterylography of birds, failed to find it in *Cypselus apus*, a form that perhaps may be regarded as the type of the swifts. (Pterology. Taf. III. fig. 17). All this is the more remarkable inasmuch as Mr. F. A. Lucas has said that "Some of the swifts, too, possess the bare space on the back of the neck, and, while this is usually quite short, yet in the species that makes the edible nests (*Callocalia fuciphaga*) and which has a very long neck, the nape tract is also long." (Rep. Nat. Mus. 1890. p. 290).

Therefore Mr. Lucas and Professor Thompson disagree on this very point in the same genus of swifts! And, to make it still more confusing, Mr. Lucas, in the work just cited, gives us a figure of the pterylosis of a hummingbird (*Florisuga mellivora*) wherein the dorsal pterylosis is strikingly different from the dorsal pterylosis of a hummingbird (*Trochilus moschitus*) given us by Nitzsch (Taf. III. fig. 18. loc. cit.) and this places Mr. Lucas, to the extent of these differences, at variance with Professor Clark, who says that the pterylography of the hummingbirds "shows such remarkable uniformity" (p. 109, cited above). Nitzsch in his figure of a hummingbird gives the "humeral tracks" clear, distinct and well defined, while Mr. Lucas in his hummingbird has the dorsal aspects of the pectoral limbs *fully feathered*, all to a small, subcircular apterium over either humerus, where the humeral tracts of Nitzsch are drawn! In fact insofar as this area is concerned, the two figures are diametrically the opposite of each other. In this comparison I have not taken into consideration the naked black areas over the pinion of either limb, shown by Lucas but overlooked in the hummingbird by Nitzsch. Why Professor Clark asks the question as he does in the title of his article in *Science*, "Are Hummingbirds Cypseloid or Caprimulgoïd?" is hard for me to say. It means to enquire whether hummingbirds are more like the swifts or more like the goatsuckers? Now only about a year ago Professor Clark admitted that "no sharp line can be drawn pterylographically between the *Caprimulgi* and the *Striges*, *Antrostomus* and

*Podargus* furnishing just such intermediate characters as might be expected from their size and habits." (*The Auk*, Apr. 1901, p. 170.) Surely Professor Clark sees nothing in the hummingbirds that leads him to believe that they have any close affinity with the owls (*Striges*)? If not, why ask the question whether hummingbirds are Caprimulgoïd? I believe him to be perfectly correct in his opinion in regard to the affinity the owls have with the goatsuckers, and insofar as their pterylography goes no one could have demonstrated it better, but one must get the ancient picarian bee completely out of one's anatomical thinking-cap before cypselo-trochiline comparisons can be made without bias and without prejudice.

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## PUBLICATIONS RECEIVED.

(Receipt of individual contributions, and reviews will appear in May.)

*American Ornithology*, II, Nos. 2, 3, Feb., Mch. 1902.

*Birds & Nature*, XI, Nos. 1, 2, Jan. Feb., 1902.

*Bird Lore*, IV, No. 1, Jan.-Feb., 1902.

*Jahresbericht des Ornithologischen Vereins-Munchen*, II, 1899 and 1900. Pub. 1901.

*Journal of the Maine Orn. Society*, IV, No. 1, Jan. 1902.

*Maine Sportsman* IX, Nos. 10, 11; Jan. Feb., 1902.

*Nature Study*, II, Nos. 8, 9, 10, Jan., Feb., Mch., 1902.

*Notes on Rhode Id. Ornithology*, III, No. 1, Jan. 1902.

*Novitates Zoologicae*, VIII, No. 4, Dec. 31, 1901.

*Ohio Naturalist*, II, Nos. 3, 4, Jan. Feb., 1902.

*Oologist*, The, XIX, Nos. 1, 2, Jan. Feb., 1902.

*Ornithologisches Jahrbuch*, XIII, Nos. 1, 2, Jan.-Apl., 1902.

*Osprey, The*, V, Nos. 11-12, Nov. and Dec., 1901. New Series, I, No. 1, Jan. 1902.

*Our Animal Friends*, XXIX, No. 6, Feb. 1902.

*Our Dumb Animals*, XXXIV, Nos. 8, 9, Jan. Feb. 1902.

*Out West*, XVI, Nos. 1, 2, Jan. Feb. 1902.

*Plant World*, IV, No. 12, Dec. 1901. V, No. 1, Jan., 1902.

*Popular Science*, XXXVI, Nos. 2, 3, Feb. Mch., 1902.

*Recreation*, XVI, Nos. 1, 2, 3, Jan. Feb. Mch. 1902.

*West American Scientist*, XII, Nos. 8, 9, Jan. Feb. 1902.

*Wilson Bulletin*, No. 37, Dec. 1, 1901.