

group Cecomorphæ of his Schizognathous series. Respecting their palate we read—“The Procellariidæ differ from the families which have just been enumerated (Gulls, Divers, Grebes, Auks, and Penguins) in the great expansion of the maxillo-palatines which become thick and spongy, and so closely approach the middle line that, in the Albatrosses, only a very narrow cleft is left on each side of the vomer. The front part of the vomer itself is much more strongly bent downwards than in the Gulls; and the ascending process of the palatine bone is greatly produced, and becomes ankylosed with the vomer. *Procellaria gigas* [*i.e.*, *Ossifraga*] holds a sort of intermediate place between the Gulls and the Albatrosses, the maxillo-palatines being less swollen, and the clefts between them and the vomer far larger than in *Diomedea*. In this species again the basipterygoid processes are present, though I have not been able to observe them in other Procellariidæ” (*loc. cit.*, pp. 430, 431). [As regards this last sentence, as will be seen below, such basipterygoid processes are the rule and not the exception in this group.] In illustration of these remarks, views of the palate of “*Procellaria*” *gigantea* and *Diomedea exulans* are given.

Of the Cecomorphæ, “the Procellariidæ are aberrant forms, inclining towards the Cormorants and Pelicans amongst the Desmognathæ” (*loc. cit.*, p. 458).

1871. G. R. Gray, in the Hand-list of Birds,¹ places the Procellariidæ between the Uriidæ and the Laridæ in his order Anseres. They are divided into three sub-families, corresponding to those already adopted by Bonaparte and Coues.

J. Reinhardt, in the same year, in his paper on the “Os crochu,” or uncinatè bone, in the skull of birds,² records its presence in nearly all the genera of this family that he has examined. In a note on p. 339 he corrects Professor Huxley’s statement as to the usual absence of basipterygoid facets in the Petrels, such being only absent in the Albatrosses and Procellarinæ (“Stormsvælerne”), present in all the rest.

1872. Carl T. Sundevall³ makes the Tubinares the fourth cohort of his order Natatores. He adopts the same three sub-families as Bonaparte, Coues, and Gray.

1873. Reinhardt describes⁴ and figures two peculiar ossicles, of the nature of sesamoids, developed at the elbow-joint of these birds in the tendon of origin of the *extensor metacarpi radialis longior*. The existence of such an ossicle in the genus *Puffinus* had already been described by Meckel,⁵ and Reinhardt finds two similar ones developed in the Albatrosses, as well as in the genera *Æstrelata*, *Puffinus*, *Majaqueus*, and *Adamastor* of the Procellariinæ. In *Æstrelata fuliginosa* and *bulweri*, *Diomedea*

¹ *Loc. cit.*, vol. iii. p. 102.

² Om en hidtil ukjendt Knogle i Hovedskallen hos Turakoerne (*Musophagides*, Sundev.) med nogle Bemærkninger om de lignende Knogler hos andre Fuglefamilier; Videnskab. Medd. Naturh. For. Kjöbenhavn, 1871, pp. 326–341, pl. vii.

³ *Methodi naturalis avium disponendarum tentamen*, Stockholm, 1872, pp. 140–143.

⁴ Om Vingens anatomiske Bygning hos Stormfugle-Familien (Procellariidæ s. Tubinares), *l.c.*, 1873, pp. 123–138; also Gervais’ *Journal de Zoologie*, vol. iii. pp. 139–144, 1874.

⁵ *Traité général, &c.*, vol. iii. p. 144, Paris, 1829.