No living Petrel has this combination of characters; the Oceanitidæ having lost their colic cæca, the Procellariidæ the accessory semi-tendinosus (Y) muscle, and both groups having become specialised in other ways.

Such an ancestral form as here indicated may be supposed to be an early, and in some respects—as shown by the large vomer, schizognathous palate, large third pectoral muscle and formula AB. XY—more primitive form, that diverged from the common stock of the Ciconiiform birds very early, when the latter had only acquired the most prevalent of the characters now existing in the various groups of that sub-order. One branch of this stock has since become greatly modified in the Tubinarial direction, whilst the other branch, loosing "B" and the large vomer, and becoming desmognathous, split up and gave origin, at different times and in different ways, to the remaining families of the group. The definiteness of the characters of these, and the amount of specialisation they show, indicate not only a great antiquity for the whole group, but also the great amount of extinction that has gone on amongst its members in the past, in the process of which nearly all the intermediate and less specialised forms have disappeared.