

the tendinous band to the ulnar fascia—which represents the morphological termination of the *tensor patagii brevis*—arises in the Albatrosses nearer the middle of the fibrous tissue lying between the two ossicles. As in the *Œstrelateæ* and *Puffineæ*, the tendon of origin of the superficial part of the *extensor metacarpi* (*e.m.*) is double, and in the figure an arrow is introduced between them to show this double nature. The proximal and smaller of these two ossicles is developed, as before, in the more superficial of these twin tendons. The larger of the two ossicles is somewhat different in shape in the Albatrosses and Petrels, being more hammer-shaped in the latter group.<sup>1</sup>

The presence of these peculiar wing-ossicles is thus confined to the *Diomedeinæ*, and to the genera *Mojaqueus*, *Puffinus*, *Bulweria*, and *Œstrelata* (in which last there is only one), and, according to Reinhardt (*s.c.*, p. 133) *Adamastor*, of the *Procellariinæ*. In the genus *Fregata* there is a similar small bony nodule developed at the point where, as in the Petrels, the inner part of the *tensor patagii longus* tendon meets the tendon of the superficial belly of the *extensor metacarpi*, and from it radiate out tendinous fibres to the patagial margin. I have observed similar ossicles, developed at points of intermittent straining, in several other birds, as *Larus argentatus* and *glaucus*, *Fratercula arctica*, and *Merops*.

These bones must be considered to be of the nature of sesamoids, which, as is well known, are often developed in the tendons of muscles at the points of greatest strain. Their occurrence therefore in different groups of birds is by no means a proof of any genetic connection between such.

*Biceps*.—This muscle, in all *Tubinares*, is remarkable for its excessive reduction, the muscular bellies being small and short, and the tendon of insertion excessively narrow and thin (*vide* Pl. IV. figs. 1, 4, and 6, *b*).

It is best developed perhaps in the *Diomedeinæ*, where as usual it arises by two heads, a coracoid and humeral (*vide* Pl. III. fig. 5, *c.*, *h.*), both, however, being largely tendinous, and soon uniting. From the coracoid head is given off a very narrow slip, chiefly tendinous with a few fleshy fibres only, which runs down in the patagium, and joins the margin of the patagium formed by the *tensor patagii longus* close to the elbow (Pl. III. fig. 5, and Pl. IV. fig. 3, *b.s.*).

In the *Oceanitidæ* the *biceps* muscle is very slender. It has the two usual heads of origin, the tendons of these being often closely united together by fibrous tissue, and ending in a small short, common belly. This apparently gives off no “biceps-slip” at all.<sup>2</sup>

<sup>1</sup> Cf. also the figures of these ossicles given by Reinhardt (*s.c.*, p. 128).

<sup>2</sup> The dissection of these parts in this group of birds is attended with considerable difficulty, partly owing to the smallness of the various parts involved, partly to the great accumulations of fat round the tissues, making the true nature of these very difficult to determine in spirit specimens. It would be very desirable to dissect out these parts in fresh specimens.