

facets on the lower end of the humerus. The shaft of the bone is triangular in form. Its posterior border is thinner than the anterior, and immediately below the upper end presents a well-defined notch, the prominent inferior angle of which affords attachment to the triceps muscle. The posterior border slopes obliquely from the notch in question, so that the lower extremity of the bone is much narrower than the upper. The anterior border of the ulna is straight, and is provided at each extremity with a small articular surface for articulation with the radius. The external surface of the bone is concavo-convex, the internal almost flat. The lower extremity of the ulna is provided with two distinct facets, which, however, are continuous with one another. The anterior is convex, and articulates with the upper end of the metacarpus; the posterior is grooved, and articulates with the ulnar carpal bone.

The ulna presents the same form in every species of Penguin. In the smaller species, however (*Eudyptes* and *Spheniscus*), the upper end of the bone relatively to the lower is broader than in the larger species (*Pygosceles* and *Aptenodytes*), and hence in the former the triangular form of the bone is more pronounced than in the latter.

The table shows the size of the ulna of different species in inches.

SPECIES.	Length of anterior border of ulna.	Length of posterior border of ulna.	Greatest breadth of ulna.
<i>Eudyptes chrysocome</i> , from Tristan, . . . . .	$1\frac{3}{4}$	$1\frac{3}{8}$	$\frac{5}{8}$
<i>Eudyptes chrysocome</i> , from the Falklands, . . . . .	$1\frac{7}{8}$	$1\frac{1}{2}$	$\frac{5}{8}$
<i>Eudyptes chrysocome</i> , from Kerguelen, . . . . .	$1\frac{3}{4}$	$1\frac{3}{8}$	$\frac{1}{2}$
<i>Eudyptes chrysolophus</i> , . . . . .	$2\frac{1}{8}$	$1\frac{3}{4}$	$\frac{3}{4}$
<i>Spheniscus demersus</i> , . . . . .	2	$1\frac{5}{8}$	$\frac{3}{4}$
<i>Spheniscus magellanicus</i> , . . . . .	$1\frac{7}{8}$	$1\frac{5}{8}$	$\frac{3}{4}$
<i>Spheniscus mendiculus</i> , . . . . .	$1\frac{5}{8}$	$1\frac{1}{4}$	$\frac{1}{2}$
<i>Spheniscus minor</i> , . . . . .	$1\frac{1}{8}$	1	$\frac{3}{8}$
<i>Pygosceles tæniatus</i> , . . . . .	$2\frac{1}{2}$	2	$\frac{3}{4}$
<i>Aptenodytes longirostris</i> , . . . . .	$3\frac{1}{4}$	$2\frac{1}{2}$	$\frac{3}{4}$

#### *The Radius.*

The radius is about two-thirds of the length of the humerus. Like all the other bones of the wing of the Penguin it is much compressed. The upper end is provided with a single cup-shaped cavity, which articulates with the anterior of the two larger facets on the lower end of the humerus. Below this surface the anterior margin of the bone is deeply notched, and affords insertion to the fibres of the brachialis internus muscle. Below