small size and does not exceed half the length of the second, to the upper half of the radial border of which it is anchylosed. Its original separation as a distinct cartilage has been proved by the observations of Gervais and Alix [1] on the wing of *Eudyptes chrysocome*, and indications of its original independence are visible even in the adult, in the presence of an oblique groove, which is more pronounced on the outer than on the inner surface of the metacarpal mass. This groove extends from the upper end of the metacarpus obliquely downwards and forwards to the radial border of the bone which it meets about the middle of its length.

The *second* or middle metacarpal bone increases in breadth from its upper to its lower end. Its radial border is anchylosed to the whole length of the first metacarpal, while its ulnar border is immovably fused at its upper and lower extremities with those of the third metacarpal bone. The shafts of these bones are separated by an elongated fissure. The surfaces of the second metacarpal bone are flat and smooth. Its upper extremity is provided with a convex articular surface, which articulates with the two carpal bones as well as with the distal extremity of the ulna. The lower end possesses a slightly concave articular surface adapted to the upper extremity of the first radial phalanx.

The *third* metacarpal bone is slightly longer than the second, but is much more slender. It is nearly cylindrical in form, and is fused at its extremities with the second metacarpal. Its upper extremity articulates with the ulnar carpal bone, while its lower possesses an oblique facet for articulation with the first ulnar phalanx.

The metacarpus of different species varies only in size. Its dimensions are given below in inches.

Species.	Length of metacarpus.	Breadth of metacarpus.
Eudyptes chrysocome, from Tristan,	$1\frac{1}{2}$	$\frac{1}{2}$
Eudyptes chrysocome, from the Falklands,	$1\frac{1}{2}$	$\frac{1}{2}$
Eudyptes chrysocome, from Kerguelen,	$1\frac{3}{8}$	$\frac{1}{2}$
Eudyptes chrysolophus,	$1\frac{5}{8}$	$\frac{5}{8}$
Spheniscus demersus,	$1\frac{5}{8}$	$\frac{1}{2}$
Spheniscus magellanicus,	$1\frac{5}{8}$	$\frac{1}{2}$
Spheniscus mendiculus,	$1\frac{1}{4}$	$\frac{1}{2}$
Spheniscus minor,	$\frac{7}{8}$	$\frac{3}{8}$
Pygosceles tæniatus,	2	$\frac{3}{4}$
Aptenodytes longirostris,	$2\frac{1}{2}$	$\frac{3}{4}$

[1] Ostéologie et Myologie des Manchots, pl. xvi. fig. 6.