

*Action.*—This muscle extends the first and second radial phalanges upon the metacarpal bone, and upon one another.

*Relations.*—It rests on the dorsal surface of the metacarpal bones, and is covered by the alar aponeurosis.

*Nerve supply* (?)

*Variations.*—In one specimen of *Aptenodytes longirostris*, as well as in *Spheniscus minor*, this muscle was entirely absent; while in a specimen of *Eudyptes chrysocome* from Kerguelen, as also in one of *Pygosceles tæniatus*, the muscle was represented by a tendon without muscular belly. In other specimens of both these species the muscle was arranged as above described.

*Remarks.*—According to Schoepss, this muscle is entirely absent in *Spheniscus demersus*. Gervais and Alix found it in *Eudyptes chrysolophus*, in which bird it presented the disposition above described. The observations of these authors with regard to its presence in *Eudyptes chrysolophus* agree with my own.

#### 8. *Interosseus palmaris.*

*Der innere Mittelhandmuskel*, Tiedemann, p. 825, No. 11.

*Der innere Mittelhandmuskel*, Heusinger, p. 197, No. 40.

*L'extenseur et abducteur externe*, Meckel, vol. vi. p. 77, No. 7.

*Der Beuger des Zeigefingers*, Schoepss, p. 173, No. 47.

*Interosseus*, Selenka, vol. vi. p. 137, No. 69.

*Interosseux palmaire*, Gervais and Alix, p. 30.

*Attachments.*—The interosseous palmar muscle like the dorsal is very slender. It arises from the contiguous borders of the radial and ulnar metacarpal bones. Its tendon passes along the palmar surface of the wing lying between the first radial and ulnar phalanges, and is inserted into the inner side of the base of the last radial phalanx.

*Action.*—This muscle flexes the first and second radial phalanges upon the metacarpal bone, and upon one another.

*Relations.*—It rests on the palmar surface of the metacarpal bones, and is concealed by the long flexor tendons of the fingers, as well as by the alar aponeurosis.

*Nerve supply* (?)

*Variations.*—In one specimen of *Pygosceles tæniatus*, as well as in *Spheniscus minor*, this muscle was absent.

*Remarks.*—The description of Gervais and Alix of this muscle in *Eudyptes chrysolophus* agrees with the above. According to Schoepss, in *Spheniscus demersus* the muscle is inserted not into the base but into the distal extremity of the second radial phalanx.

#### COMPARATIVE REMARKS.

Having now described the muscles of the wing, and the varieties which these present