

The table shows the dimensions in inches of this bone in different species of Penguin.

SPECIES.	Length of second phalanx of second finger.	Breadth of base of second phalanx of second finger.
<i>Eudyptes chrysocome</i> , from Tristan, . . . . .	$\frac{3}{4}$	$\frac{1}{4}$
<i>Eudyptes chrysocome</i> , from the Falklands, . . . . .	$\frac{3}{4}$	$\frac{1}{4}$
<i>Eudyptes chrysocome</i> , from Kerguelen, . . . . .	$\frac{3}{4}$	$\frac{1}{4}$
<i>Eudyptes chrysolophus</i> , . . . . .	$\frac{3}{4}$	$\frac{1}{4}$
<i>Spheniscus demersus</i> , . . . . .	$\frac{7}{8}$	$\frac{1}{4}$
<i>Spheniscus magellanicus</i> , . . . . .	$\frac{7}{8}$	$\frac{1}{4}$
<i>Spheniscus mendiculus</i> , . . . . .	$\frac{5}{8}$	$\frac{3}{10}$
<i>Spheniscus minor</i> , . . . . .	$\frac{1}{2}$	$\frac{1}{8}$
<i>Pygosceles teniatus</i> , . . . . .	1	$\frac{1}{4}$
<i>Aptenodytes longirostris</i> , . . . . .	$1\frac{1}{4}$	$\frac{3}{8}$

The single *phalanx of the third finger* is elongated and pointed, and diminishes in breadth from base to apex. It is slightly longer than the first phalanx of the middle finger, so that its extremity reaches beyond the articulation between the first and second phalanges of that finger. Its base is provided with a single articular surface for articulation with the third metacarpal bone, and a small osseous nodule projects upwards from the ulnar margin of the bone beyond that surface. The lateral surfaces of the bone are smooth and flat.

The dimensions of this bone in different species are given in inches in the table on the following page.

#### COMPARATIVE REMARKS.

The skeleton of the Penguin's wing as a whole differs in several particulars from that of other birds. Perhaps its most characteristic feature is to be found in the great amount of compression exhibited by all the bones of the anterior extremity. This flattening of the bones has doubtless arisen in accordance with the altered function of the wing in these birds. In the majority of birds the principal function of the wing is to support the bird in, and to propel its body through the air. In the Penguins, on the other hand, the power of flight is lost, and the wing is converted into a paddle which serves the purpose of propelling the bird through the water. In accordance with this alteration of function, the bones of the wing are so modified in form that that organ may be carried forwards while its sharp anterior margin offers the minimum resistance to the sur-