

great development of the scapular muscles. The relatively large size of the bone is due to increase in breadth rather than in length, the latter remaining much the same as in other birds.

In *Eudyptes chrysocome* from Tristan d'Acunha (Pl. VII. fig. 1), the bone is scimitar-shaped, and increases in breadth from the narrowest point or neck, which is situated immediately behind its articular extremity, nearly to the posterior extremity of the bone. The bone is much flattened, and presents two surfaces—an external and an internal, both of which are rough and uneven, for the attachment of muscles. Immediately in front of its narrowest point, the scapula expands in breadth, and develops its articular facets. These are arranged in the manner common to birds. The inner of the two articular surfaces articulates with the extremity of the clavicle, while the outer, which is separated from the inner by a shallow notch, is divided by means of a vertical ridge into two parts. Of these the internal articulates with the shaft of the coracoid bone, while the external contributes to the formation of the glenoid fossa for the reception of the head of the humerus. The posterior angle of the scapula extends in *Eudyptes chrysocome* as far back as the sixth vertebral rib, which it slightly overlaps.

The form of the scapula varies considerably in different Penguins.

In every member of the genus *Eudyptes* (Pl. VII. fig. 1) the scapula agrees in form with that of *Eudyptes chrysocome*. In this genus the bone increases in breadth somewhat abruptly. The posterior border of the bone is obliquely truncated from above downwards and forwards, and the angle between the superior and posterior borders of the blade of the scapula projects farther backwards than any other portion of the bone.

In *Spheniscus* (Pl. VII. fig. 2) a posterior border of the scapula can hardly be said to exist, the superior and inferior borders of the bone meeting together posteriorly to form a rounded angle which forms the posterior extremity of the bone.

In *Aptenodytes* (Pl. VII. fig. 4) the scapula more closely resembles that of *Eudyptes* than of *Spheniscus*. In it the bone expands more gradually from the neck to the blade than in *Eudyptes*, but its posterior border is even more clearly defined than in that genus. In *Aptenodytes*, however, the posterior border of the scapula forms nearly a right angle with both the superior and inferior borders of the bone, and is less obliquely truncated than in *Eudyptes*. In *Spheniscus* the reverse is the case, the posterior border of the scapula in that genus being indistinguishable because of the coalescence of the superior and inferior borders of the bone.

In *Pygosceles* (Pl. VII. fig. 3) the scapula differs from that of the three other genera, inasmuch as it is relatively shorter and broader, the blade of the bone as distinguished from the neck expanding more abruptly from the neck than in the other genera. The angle, moreover, which forms the posterior portion of the bone is the angle between the inferior and posterior borders of the scapula, whereas in *Eudyptes* and *Aptenodytes* it is the angle between the superior and posterior borders of the scapula. Lastly, in *Pygosceles* the superior border of the scapula resembles that of *Spheniscus*