

and convex, and close to their junction with the body of the bone present a well-defined circular depression, in which is lodged the external basal angle of the coracoid bone. Their upper or thoracic surfaces are concave, smooth, and continuous with the hollowed surface of the body of the bone. Their lateral margins are devoid of any articular surfaces for the sternal ribs, the most anterior of which is placed on the lateral margin of the sternum, immediately behind the base of the costal process. The grooves for the reception of the coracoid bones are deep, and correspond in breadth with the base of the costal process. Their inner extremities approach within half an inch of each other.

The thoracic surface of the bone is smooth and uniformly concave.

The anterior third of the lateral margin of the sternum is provided with six articular surfaces, for the reception of the extremities of as many of the sternal ribs. The most posterior of these depressions is of smaller size than the others, in accordance with the diminutive size of the sixth sternal rib. The posterior two-thirds of this margin is formed chiefly by the external xiphoid process. It is thin, sharp and slightly convex.

The keel of the sternum is triangular in form, and extends along the whole length of the bone. Its greatest depth is in front, from whence it slopes gradually backwards to the posterior border of the bone. The anterior border of the keel is straight and obliquely placed, being inclined slightly forwards from the line of attachment of the keel to the body of the bone.

The anterior border of the sternum is prolonged forwards beyond the anterior margin of the keel, in the form of a small laterally compressed spine of bone or episternum, measuring one-fourth of an inch in length, and rather less in breadth.

Although the sternum presents the same general form in every species of Penguin, differences occur in the configuration of separate portions of that bone in different species. These differences may be included in three groups, according as they relate to the body of the bone, to the keel, or to the costal processes.

Firstly.—With regard to the body of the bone, I find that while in every species of the four genera which I have examined, with the exception of *Aptenodytes longirostris* and *Eudyptes chrysocome* from the Falkland Isles, the body of the sternum is of the same breadth from end to end, in the two species mentioned the sternum is distinctly narrower opposite the articulation of the last sternal rib. Hence at this spot the lateral border of the bone presents a distinct concavity, which although indicated in the sterna of other species, is only fully developed in that of *Eudyptes chrysocome* from the Falklands, and to a greater extent in that of *Aptenodytes longirostris*.

In *Eudyptes chrysocome* from the Falkland Isles (Pl. VI. fig. 11), the sternal notches are wider and the external xiphoid processes broader and stronger than in the varieties of the same species from Tristan d'Acunha or Kerguelen Island.

The articular depressions for the reception of the sternal ribs are six in number on either side in every species, with the single exception of *Pygosceles taniatus*, in which,