in accordance with the fact that seven sternal ribs articulate with the breast bone, there are seven distinct depressions on the lateral margin of the sternum.

In *Pygosceles*, moreover, the relative lengths of the middle and external xiphoid processes, as compared with those of every other species, are reversed. In the latter the external xiphoid processes exceed the middle process in length, while in *Pygosceles* (Pl. VI. fig. 12) the central xiphoid process equals or even exceeds that of the external processes.

The central xiphoid process is relatively narrower in *Eudyptes* than in *Spheniscus*.

Secondly.—In accordance with the form of the sternal keel, the Penguins may be divided into two groups. In the first of these the anterior border of the sternal keel forms nearly a right angle with the plane of the body of the bone, and consequently the anterior-inferior, or furcular angle of the keel projects but little beyond the anterior border of the bone. This form is most strongly pronounced in *Pygosceles* (Pl. VI. fig. 5). In the second group the anterior border of the sternal keel forms an obtuse angle with the plane of the body of the sternum, and consequently the furcular angle of the keel is acute, and projects to a greater extent beyond the anterior border of the bone. This form is best seen in *Aptenodytes* (Pl. VI. fig. 6).

Of the other two genera, *Spheniscus* (Pl. VI. fig. 4) most closely resembles *Aptenodytes* in the form of the furcular angle of the carina sterni, while *Eudyptes* (Pl. VI. figs. 1, 2, 3) occupies an intermediate position between *Aptenodytes* and *Pygosceles*, the furcular angle of the keel being less acute than in the former, and more so than in the latter genus.

In *Eudyptes chrysocome* the anterior margin of the sternal keel is concave, while in both other varieties of the same species it is straight.

In *Pygosceles* the keel as a whole is less prominent than in any other genus.

In the same manner, taking into consideration the size and form of the episternum, the Penguins may be divided into two groups, which coincide with those founded on the form of the sternal keel.

In *Aptenodytes* (Pl. VI. fig. 6) the episternum is entirely absent, while in *Pygosceles* (Pl. VI. fig. 5) it forms a broad laterally compressed plate of bone with irregular edges. Both *Spheniscus* (Pl. VI. fig. 4) and *Eudyptes* (Pl. VI. figs. 2 and 3) present an intermediate condition. An episternum is present in every species of both these genera, and presents the form of a slender, laterally compressed spicule of bone, of smaller size than in *Pygosceles*, but larger than in *Aptenodytes*.

Thirdly.—The modifications in the form and direction of the costal processes agree with the peculiarities already pointed out in the configuration of the body and keel of the sternum.

In *Aptenodytes longirostris* (Pl. VI. fig. 10) the costal processes are of large size, and project obliquely forwards and outwards from the anterior margin of the sternum, so that their inner border forms an obtuse angle with the latter. In *Pygosceles* (Pl. VI. fig. 9),