3. *Obliquus abdominis internus.*

Le petit oblique, Vicq d'Azyr, 1774, p. 490, No. 2.
Der innere schräge Bauchmuskel, Merrem.
Der innere schräge Bauchmuskel, Wiedemann, p. 80.
L'oblique interne, Cuvier, vol. i. p. 217.
Der innere schräge Bauchmuskel, Tiedemann, p. 296, No. 2.
Muscle oblique interne de l'abdomen, Meckel, vol. vi. p. 19, No. 2.
Obliquus internus abdominis, Owen, p. 30.
Obliquus internus abdominis, Selenka, vol. vi. p. 103, No. 26.
Le petit oblique de l'abdomen, Gervais and Alix, p. 16.

Attachments.—The internal oblique *arises* from the middle third of the external border of the pelvic bone. The fibres pass obliquely forwards and downwards, and are *inserted* into the lower two-thirds of the posterior border of the last vertebral rib.

Action.—This muscle co-operates with the internal intercostal muscles in depressing the ribs and diminishing the capacity of the abdominal and thoracic cavities.

Relations.—The muscle fills up the interval between the pelvic bone and the last rib. Superficially it is concealed by the obliquus externus. Its deeper surface rests upon a large air sac, which separates it from the subjacent transversalis abdominis.

Nerve supply.—Branches from the last intercostal nerve.

Variations.—In *Aptenodytes* the origin of the muscle is limited to the anterior half of the pubic bone, and its insertion extends to the last two vertebral ribs. In *Pygosceles* the origin is confined to the ilium, and the muscle takes no attachment to the pubis. In *Eudyptes chrysolophus* the muscle is inserted into the vertebral third of the last two ribs, while in *Spheniscus minor* the internal oblique arises from the whole length of the pubic bone, and not at all from the ilium.

Remarks.—I have experienced considerable difficulty in deciding the synonymy of this muscle. The description above given certainly corresponds more closely to that of the quadratus lumborum (No. 9, p. 302) of Tiedemann, than to that of the obliquus internus of that author. If, however, we assume that the internal oblique as above described really corresponds to the quadratus lumborum of Tiedemann, we must conclude that the obliquus internus abdominis is absent in every species of Penguin. This conclusion, in view of the constant occurrence of the internal oblique in other birds, seems so likely to be erroneous, that I prefer to believe that the obliquus internus of the Penguin presents a somewhat unusual disposition rather than that it is entirely wanting.