

*Action.*—The muscle co-operates with the coraco-brachialis in approximating the wing to the side of the body, as well as in rotating that organ inwards at the shoulder joint.

*Relations.*—The muscle is concealed superficially by the anterior portion of the latissimus dorsi. Its posterior margin is in contact with the infra-spinatus muscle.

*Nerve supply.*—A twig from the nerve to the latissimus dorsi, which turns round the axillary margin of the scapula, and enters the outer border of the muscle.

*Remarks.*—Cuvier<sup>1</sup> merely mentions the presence in birds of a supra- and infra-spinatus muscle, but does not describe their exact attachments. Gervais and Alix<sup>2</sup> state that in the Penguin (*Eudyptes chrysolophus*) the supra-spinatus (petit rond) is inserted above the subscapularis. As above stated, I have found that in every species of Penguin, the supra-spinatus and the subscapularis are attached to the humerus by means of a single tendon common to both.

### 8. *Infra-spinatus.*

*Sous-scapulaire*, Vicq d'Azyr, 1772, p. 63I, No. 3.

*Schulterblattmuskel*, Merrem, p. 154, No. 13.

*Schulterblattmuskel*, Wiedemann, p. 87.

*Supra-scapularis*, Tiedemann, p. 310, No. 8.

*Supra-scapularis*, Heusinger, p. 184, No. 8.

*Sous-épineux*, Meckel, vol. vi. p. 29, No. 5.

*Infra-spinatus v. Teres major*, Schoepss, p. 105, No. 13.

*Infra-spinatus*, Reid, p. 141.

*Teres major*, Selenka, vol. vi. p. 113, No. 37.

*Le grand rond*, Gervais and Alix, p. 22.

*Attachments.*—The infra-spinatus arises from the posterior three-fourths of the dorsal surface of the scapula. The fibres pass forwards and downwards and end on a strong tendon which is inserted into the inner margin of the tricipital fossa of the humerus one-eighth of an inch below the bony tubercle which affords attachment to the tendon common to the supra-spinatus, coraco-brachialis, and subscapularis.

*Action.*—The humerus being raised, this muscle is an important, if not the principal agent in bringing about the backward or effective stroke of the wing. This muscle, moreover, rotates the humerus inwards at the shoulder joint, and thus co-operates with the pectoralis major.

*Relations.*—Superficially the muscle is covered by the dorsal cutaneous muscle, and by the anterior portion of the latissimus dorsi. Its upper border lies parallel to, and in contact with the posterior border of the supra-spinatus. The lower border projects considerably beyond the axillary border of the scapula, and forms the posterior boundary of the axilla.

<sup>1</sup> Leçons d'Anatomie Comparée, tom. i. p. 278.

<sup>2</sup> *Loc. cit.*, p. 22