

The pectoralis major is inserted into the pectoral ridge of the humerus, whilst the pectoralis minor finds attachment at a higher level into the great tuberosity of the humerus, and also into the tendon of the supraspinatus. The two muscles therefore cross each other as they pass towards their insertions.

The pectoralis quartus is composed of two minute fleshy slips which arise from the linea alba, and end by fusing with the under surface of the pectoralis major.

A study of Cuvier and Laurillard's plates shows that the *Phalangista cavifrons* (pl. clxxix. fig. 2, $j, j^1, j^2 + j$), the *Macropus minor* (pl. clxxxi. fig. 1, $j, j^1, j^2, j +$), and the *Macropus major* (pls. cxci. and cxci.) agree in almost every respect with the *Cuscus* in the arrangement of the pectoral muscles. In the Wombat Professor Macalister¹ describes the same four pectoral muscles; in the Tasmanian Devil he states that the pectoralis major is not segmented (*i.e.*, there is no deep portion), and in this respect, therefore, it corresponds with the *Phascogale*. In both these animals, however, the great pectoral muscle receives fibres of origin from the clavicle.

There is a diversity of opinion regarding the character of the pectoralis quartus. Owen² looks upon it as "a dismemberment of the pectoralis major." Humphrey and Macalister¹ believe that it is in an "intermediate piece of the great superficial external muscular sheet between the pectoralis major and latissimus dorsi." Its close connection in many cases with the panniculus carnosus would almost seem to indicate that it is merely a portion of this muscle. In the *Cuscus*, indeed, it appeared to be simply the thickened lower margin of the panniculus, the connection between them was so intimate.

Scapular muscles.—In all the three specimens the supraspinatus is much more bulky than the infraspinatus. This is most marked in the *Phascogale* in which it is fully three times as large. In the *Thylacine* it is nearly twice as large (Pl. I. figs. 4 and 5, *s.s.*); in the *Cuscus* the disparity in size is not quite so great.

A teres minor, distinct from the infraspinatus, is present in the *Thylacine* (Pl. I. fig. 4, *t.m.*²) and *Cuscus*. In both cases this muscle is supplied by a small twig from the circumflex nerve. It arises from a small portion of the axillary border of the scapula close to the glenoid cavity, and is inserted into the humerus upon its outer and posterior aspect immediately below the great tuberosity. In the *Phascogale* the teres minor is absent, and no twigs from the circumflex nerve could be traced to the portion of the infraspinatus which might be supposed to represent it.

The teres major is well developed in each of the three specimens. It has a very slight origin from the dorsum of the scapula at the posterior angle of the bone. Its main origin is from the axillary border of the scapula in its upper two-thirds. Here it is intimately connected with the posterior border of the subscapularis by means of an intermuscular septum, which gives fibres to both. In the *Cuscus* (Pl. II. fig. 4, *t.m.*) and *Phascogale* it receives a slip from the latissimus dorsi, and is then inserted into the inner

¹ *Loc. cit.*, p. 3.

² *Anatomy of Vertebrates*, vol. iii. p. 12.