

In Cuvier and Laurillard's plates both the short and long slips are figured in the *Phalanger* (*Phalangista cavifrons*) (pl. clxxix. fig. 4, *q*); whilst in the Virginian Opossum (pl. clxxv. fig. 4, *q*) and the Giant Kangaroo the short muscle is alone represented. In the Wombat, *Sarcophilus*, and *Macropus ruficollis*, Professor Macalister¹ describes only the short variety of the muscle, but in the Koala Mr. Young² states that the three muscles are present, although the coraco-brachialis medius and coraco-brachialis longus are fused.

Biceps.—In the *Thylacine* the biceps springs by two tendons from the upper margin of the glenoid cavity and from the coracoid process. These after a short independent course unite to form a powerful flattened tendinous band from which the muscular fibres issue. At first the fleshy belly is undivided, but about the junction of the upper with the middle thirds of the upper arm it splits into a superficial and a deep portion (the coraco-radial and the gleno-ulnar muscles). The former is inserted into the radial tubercle, whilst the latter is fixed along with the brachialis anticus into the coronoid process of the ulna.

In the *Cuscus* (Pl. II. fig. 4, *b.*) and *Phascogale* the two portions of the biceps show similar attachments, but the fleshy bellies are distinct throughout, and there is merely a partial fusion of the tendons of origin. If the muscles be forcibly torn asunder in an upward direction it will then be seen that, whilst the gleno-ulnar arises from the upper margin of the glenoid cavity alone, the coraco-radial has a double origin, *i.e.*, both a coracoid and a glenoid origin; it therefore presents the same attachments as the entire muscle in man.

Brachialis anticus.—In the *Thylacinus* (Pl. I. figs. 4 and 5, *b.a.*) the brachialis anticus has a linear origin from the posterior aspect of the shaft of the humerus under cover of the outer head of the triceps, but separated from it by a well-marked external intermuscular septum. The muscle winds round the bone so as to clothe its outer surface and gain the anterior aspect of the limb at the elbow-joint; here it is inserted behind the gleno-ulnar into the coronoid process of the ulna.

In the *Cuscus* and *Phascogale* the brachialis anticus differs from that of the *Thylacine* in deriving fibres of origin from the outer aspect of the humeral shaft, and also in having a closer connection with the external intermuscular septum.

Triceps.—In Marsupials this muscle is usually very strongly developed, and the three animals under consideration offer in this respect no exception to the general rule. In *Thylacinus*, indeed, it seems to attain a maximum development. In all the three heads are easily separable.

In the *Thylacine* (Pl. I. figs. 4 and 5, *tr*¹. *tr*².) the scapular head has a very extensive and at the same time a somewhat peculiar origin. It springs from nearly the whole length of the axillary border of the scapula and by two distinct sets of fibres, *viz.*, (1) a series which have a tendinous origin from the bone close to the glenoid cavity, and which pass down to constitute the long head of the triceps as it is usually observed. (2) A

¹ Annals and Magazine of Natural History, vol. v.

² Journal of Anatomy and Physiology, vol. xvi.