

internal condyle. Its lower margin, therefore, reaches lower down than that of the adductor brevis, and it is, in like manner pierced by the femoral artery (Pl. IV. fig. 1, *f.a.*). The quadratus femoris is in apposition with its upper border, whilst fused with it posteriorly are the lower fibres of the ischio-femoral muscle.

In the *Cuscus* (Pl. V. fig. 4) there are only two adductors present, viz., the adductor brevis and the adductor magnus. The absence of the adductor longus is rendered evident by the fact that the obturator nerve lies upon the superficial aspect of the adductor brevis.

The adductor brevis (*e*) is much the larger of the two muscles, and it completely hides the adductor magnus from the front. It has a curved origin from the base of the marsupial bone, and from the margin of the pubic symphysis, under cover of the gracilis (*f*). Its insertion is the same as the corresponding muscle in *Thylacinus*, and, like it, it is pierced by the femoral artery (*e*¹). The adductor magnus (*d*) is a thick fleshy strap, which arises from the arch of the pubis and the ischial tuberosity, and is inserted into the posterior aspect of the shaft of the femur in its lower third. It is not perforated by the femoral artery. The two muscles are easily separated from each other.

The triceps adductor is subject to considerable variations in the Marsupialia. Thus Macalister¹ records that the three portions are quite distinct in the Wallaby and Giant Kangaroo, whilst the adductor brevis and the adductor magnus are partially, or it may be completely, blended in the Opossum, *Sarcophilus*, Wombat, and in *Phalangista*.

Posterior Aspect of Leg.

The superficial muscles on the back of the leg are the gastrocnemius and the plantaris. In all probability the absent soleus is blended with the outer head of the gastrocnemius.

Gastrocnemius.—This muscle in *Thylacinus* arises by two very large and powerful heads. The outer head which contains the soleus is much the larger of the two, and it arises by two parts—(1) by a fleshy process fixed to a large sesamoid bone placed upon the posterior aspect of the head of the fibula, and from a powerful ligament which binds the upper part of this bone to the back of the external condyle of the femur; (2) by a tendinous slip attached to the outer aspect of the external condyle of the femur. The external popliteal nerve passes forwards between these slips of origin. The inner head, springs not only from the back of the internal condyle, but also from the whole breadth of the popliteal surface of the femur at the same level. The heads of the gastrocnemius join each other very shortly after their origin and the tendo achillis is inserted into the lower part of the posterior surface of the os calcis.

In the *Cuscus* the two heads of the gastrocnemius are separate throughout their entire length. The muscle therefore is present in the form of two distinct factors. The inner head (Pl. V. fig. 2, *b*) arises from the back of the internal condyle of the femur; it derives

¹ Ann. and Nat. Hist., vol. v., 4th series.