

MYOLOGY OF THE HIND LIMB.

I regret that in this chapter I am only able to give an account of the myology of the hind limb in the *Thylacine* and *Cuscus*. The pelvis and posterior limbs of the *Phascogale* were so shattered with shot that it was impossible to conduct a proper examination of their anatomy.

Gluteal Region.

Gluteus maximus (ecto-gluteus) (Pl. III. fig. 1, *ec.g*^{1.}, *ec.g*^{2.}, *ec.g*^{3.}; and Pl. IV. fig. 5, *ec.g*^{1.} and *ec.g*^{2.}).—In the *Cuscus* the gluteus maximus is represented by three muscles all occupying the same plane, and placed superficial to the other structures of the gluteal region. These three muscles arise in a continuous line from the anterior superior spine of the ilium in front to the fourth caudal vertebra behind. The two posterior muscles are only partially separated from each other, and they together represent the agitator caudæ. The anterior muscle is the combined gluteus maximus and tensor fasciæ femoris.

The agitator caudæ (Pl. III. fig. 1, *ec.g*^{2.}, *ec.g*^{3.}) is a large, powerful muscle. Its anterior and smaller portion arises from the fascia over the hinder part of the sacrum and from the first caudal vertebra; the wider posterior portion springs from the fascia over the second caudal vertebra and from the transverse processes of the third, fourth, and fifth caudal vertebræ. Both portions of the muscle are inserted into the posterior aspect of the femur in a continuous line from the root of the great trochanter above to within an inch of the external condyle below (*ec.g*^{2.} × and *ec.g*^{3.} ×).

The combined gluteus maximus and tensor fasciæ femoris (Pl. III. fig. 1, *ec.g*^{1.}) is a thin layer of muscular fibres which arises from the fascia over the last lumbar vertebra and the sacrum, from the fascia over the gluteus medius (meso-gluteus) muscle and also from a tendinous cord which passes horizontally backwards from the anterior superior spine of the ilium. This fibrous cord is fully an inch and a half long, and gives origin by its superior border to the three gluteal muscles, whilst by its inferior margin it gives attachment to the sartorius and the obliquus internus. At first sight it has the appearance of being the representative of Poupert's ligament, but it cannot in any respect be considered the homologue of this structure, seeing that the aponeurosis of the external oblique is in no way connected with it. The gluteus maximus is inserted into the outer aspect of the root of the great trochanter, and also slightly into the posterior aspect of the shaft of the bone below this. The posterior margin of the muscle is free, and quite distinct from the agitator caudæ; in front, however, it winds round the anterior border of the meso-gluteus (Pl. III. fig. 1, *ec.g*^{1.} ×), and becomes inseparably connected with the gluteus minimus (endo-gluteus). In this manner, therefore, the superficial and deep gluteal muscles enclose the meso-gluteus on all sides except posteriorly. That the anterior fibres of the muscle just described represent the tensor