

endo-gluteus, and supplies filaments to both. In *Cuscus* a long slender twig can be traced downwards to end in the ecto-gluteus, where it folds round the lower margin of the meso-gluteus to become continuous with the endo-gluteus. The fibres to which this twig is distributed undoubtedly represent the tensor fasciæ femoris.

*Small sciatic.*—In the *Thylacine* (Pl. IV. fig. 5, *s.s.n*) this is a purely cutaneous nerve, whilst in the *Cuscus* (Pl. III. fig. 1, *s.s.n*) it also contains motor fibres which it dispenses to the ecto-gluteus. Emerging from the pelvis through the great sacro-sciatic foramen in front of the pyriformis it makes its entrance into the gluteal region under cover of the meso-gluteus. It soon appears at the posterior border of this muscle, and then proceeds backwards upon the pyriformis and ischio-femoral muscles covered by the ecto-gluteus. Finally, dipping under the superficial vertebral origin of the biceps muscle it becomes superficial on the back of the thigh, and is distributed to the skin as low down as the upper part of the leg.

*Nerve to hamstrings* (Pl. III. fig. 1, *h.n*, and Pl. IV. fig. 5, *h.n*).—This is hardly an appropriate name for this nerve, seeing that it has a much wider distribution than to the hamstring muscles, but it is difficult to suggest a better. It is a large nerve, composed entirely of motor fibres. It enters the gluteal region through the great sacro-sciatic foramen, and proceeds backwards upon the endo-gluteus, and under cover of the pyriformis. At the lower border of the latter muscle it gives off a large branch (Pl. III. fig. 1, *g.n*)—the representative of the nerve to the quadratus femoris in man,—and then continues downwards under the ischio-femoral muscle to the under surface of the biceps muscle. Here it breaks up into a large number of branches for the supply of the biceps and its various accessory parts, the semitendinosus and the semi-membranosus.

In the *Cuscus* the nerve to the quadratus femoris sinks into the substance of the gemelli muscles, and is continued backwards through their muscular fibres. Issuing from the midst of the gemellus inferior, it is carried downwards under cover of the quadratus femoris to the adductor magnus. In this course it supplies twigs to the gemelli, quadratus femoris, and probably to the obturator internus, whilst it ends in the adductor magnus, and constitutes its sole nerve of supply.

In the *Thylacine* the distribution of the nerve to the quadratus is precisely similar to that in the *Cuscus*, but its relations to the gemelli muscles are somewhat different. Each gemellus consists of a superficial and deep part, and the nerve in passing backwards passes between the two portions of the superior muscle, and then under cover of the obturator internus and both portions of the inferior gemellus.

In *Thylacinus* and *Cuscus*, therefore, the adductor magnus is associated by its nervous supply with the quadratus femoris, and it draws branches from neither of its usual sources, viz., the great sciatic and the obturator nerves. The advocates for the theory that nerve-supply points infallibly to the homology of a muscle will find this a difficult fact to solve. Of course it might be explained by supposing that the adductor magnus