

Extensors on the Leg and Foot of Mammalia, will show how variable the long saphenous nerve is in respect to its terminal distribution. In the *Mustela foina*, *Meles vulgaris*, *Felis domestica*, *Cercopithecus*, it ends before it reaches the foot; in the *Ornithorhynchus paradoxus*, *Didelphys virginiana*, *Nasua socialis*, *Felis leo*, *Inuus cynomolgus*, *Cebus*, and Orang it reaches the dorsum of the foot, and supplies filaments to the skin of the hallux. In none of these, however, excepting the *Ornithorhynchus*, is its area of supply on the dorsum of the foot so wide as in the *Cuscus*.

The obturator nerve¹ (Pl. V. figs. 5 and 6, *o*, and fig. 4, 1; also Pl. IV. fig. 1, *o.n*) is small in comparison with the corresponding nerve in man. It arises in *Thylacinus* in common with the anterior crural, and in *Cuscus* by two roots from the 4th and 5th lumbar nerves. Its course and distribution is the same in both animals. Quitting the pelvis through the upper part of the thyroid foramen it supplies branches to the obturator externus and the adductors longus and brevis, and ends by sinking into the substance of the gracilis. It gives no twigs to the pectineus or adductor magnus, neither does it divide into a superficial and deep division.

Sacral plexus.—In *Thylacinus* (Pl. V. fig. 5) the sacral plexus is apparently formed entirely by the lumbo-sacral cord, which is prolonged into the gluteal region as the great sciatic nerve (*g'.s*). No communication could be traced between this great nervous trunk and the first sacral nerve. Before quitting the pelvis it gives origin to (1) the superior gluteal (*s.g*); (2) a special branch to the ecto-gluteus (*g.m*); (3) a special nerve to the hamstring muscles (*h*); (4) branches to the pyriformis.

From the 1st sacral nerve the pudic (*p*) and small sciatic nerves (*s.s*) take origin.

In the *Cuscus* the arrangement is quite different (Pl. V. fig. 6). The lumbo-sacral cord is joined by the whole of the 1st sacral nerve, and a small portion of the 2nd sacral nerve, and a large nervous band is thus formed. This divides into two unequal parts, of which the larger is the great sciatic (*g'.s*) whilst the smaller gives origin to (1) a special branch to the ecto-gluteus (*g.m*); (2) the small sciatic (*s.s*); (3) the special nerve to the hamstrings (*h*).

The superior gluteal nerve (*s.g*) arises from the lumbo-sacral cord before it is joined by the sacral nerves, and the pudic (*p*) comes from the 2nd sacral nerve.

Nerves to ecto-gluteus.—The several parts of this muscle (the representatives of the gluteus maximus in man) are supplied differently in the two animals. In *Thylacinus* one large nerve enters the gluteal region through the anterior part of the great sacro-sciatic foramen, and breaks up into branches for the supply of the four constituent parts of the ecto-gluteus (Pl. IV. fig. 5, *g.n*). In *Cuscus* this branch is much smaller in size, because the ecto-gluteus also draws twigs from the small sciatic.

Superior gluteal nerve (Pl. III. fig. 1, *s.g.n*).—After emerging from the pelvis through the great sacro-sciatic foramen, this nerve ramifies between the meso-gluteus and

¹ In the Fox the obturator springs from the 5th and 6th nerves, and in the Ass from the 4th, 5th, and 6th (Swan).