the migration of a muscle, the anterior part of the semimembranosus in the Phocinæ having become an adductor muscle in *Arctocephalus* by changing to a more anterior position in the hind limb. The former adducts the thigh and leg and rotates the limb, and the latter adducts the leg and also rotates it. In the Phocinæ it is supplied by the obturator nerve.

The Semitendinosus, which is named Musc. coccygo-tibialis by Lucae and the semimembranosus by Murie, has two heads of origin. The dorsal head arises from the posterior half of the spine of the last sacral vertebra, from the spine of the 1st caudal vertebra, and is continuous anteriorly with the gluteus maximus. The ventral head arises from the side and ventral surface of the dorsal sacro-iliac ligament, and from the transverse processes and bodies of the 4th and 5th sacral, and the 1st and 2nd caudal vertebræ. The dorsal head is inserted upon the dorsal surface of the ventral head, half an inch from the caudal vertebræ. The ventral, thus strengthened, passes to the posterior two-thirds of the front of the tibia, into which it is inserted. In Phoca hispida the dorsal part was not seen, and the ventral part was also in a bad state of preservation. It appeared to arise from the 2nd, 3rd, 4th, and 5th caudal vertebræ, and to be inserted into the posterior two-thirds of the front of the tibia above the semimembranosus. In *Phoca barbata* the dorsal head, or gluteal slip, which is continuous with the hindmost fibres of the gluteus maximus, arises from the 2nd and 3rd caudal vertebræ; the ventral head arises from the 2nd, 3rd, 4th, and 5th caudal vertebræ. The insertion is the same as in Phoca hispida.

In Macrorhinus leoninus there are two heads of origin. The dorsal head arises from the spine of the 2nd caudal vertebra, under cover of the gluteus maximus, and from the dorsal sacro-iliac ligament, as in the others. The fibres are obliquely directed backwards and outwards. It is inserted into the posterior third of the second head near the commencement of the tendon, which is midway between the origin and insertion. The ventral head arises from the sides of the 1st, 2nd, 3rd, and 4th caudal vertebræ near the anterior surface of their bodies. Midway between its origin and insertion it forms a very strong broad tendon, which is inserted into the posterior half of the ventral surface of the tibia; the outer half covers the gracilis.

In Arctocephalus gazella it arises from the transverse processes of the 2nd, 3rd, 4th, 5th, and 6th caudal vertebræ, and from the sides of the bodies of these vertebræ between the transverse processes and their tubercles. It is inserted into the lower half of the ventral surface of the tibia. In Otaria and Trichechus it is inserted into the posterior half of the tibia like Arctocephalus. The action is the same as in the last muscle. Humphry, Lucae, and Murie do not refer to the double mode of origin. In the Phocinæ it is supplied by the obturator nerve.

The Biccps, or ischio-tibialis of Lucae, consists of two distinct muscles, and these are named the Biccps or long head, and the Sacro-peroneus or short head (sacro-fibularis of Lucae). In Phoca vitulina the long head is fan-shaped, and arises from the ischial tuberosity, and from the dorsal and outer surface of it by a pointed fasciculus. It spreads out or radiates towards the fibula. Over the peronei it extends from the head of the fibula almost to the malleoli. Here it is bound to the deep fascia covering the peroneal muscles, and terminates by joining the strong fascia over the outer muscles of the leg, which fascia is bound to the outer and ventral surface of the tibia. The portion at the lower end of the fibula joins the sacro-peroneus and is inserted with it. The short head or sacro-peroneus is riband-like, and arises from the under surface of the dorsal sacro-iliac ligament, from the sides of the 2d and 3rd sacral vertebræ. It goes obliquely backward and outward to the lower outer third of the fibula. It is inserted, after joining the former, into the posterior quarter