

femoralis of the text of Lucae, and the ilio-femoralis major and minor of his drawing. It is in part formed by a continuation onwards of some of the fibres of the psoas magnus, and by fibres springing from the posterior ventral spine of the ilium. A number of the superficial fibres of the psoas magnus pass over the spine, and run with a fresh set of fibres which *arise* from the posterior ventral spine. The fibres from these two sources proceed backwards and outwards, lying to the outer side of the psoas tertius, and are *inserted* into the lower outer third of the inner border of the femur.

In *Phoca barbata* it *arises* from the posterior half of the posterior ventral spine of the ilium, from the side of the sacrum, from the sacro-iliac ligament, and from the ventral surface of the ilium along the anterior or upper border to the spine. A few fibres of the psoas magnus run into it, and after receiving them it courses along the outer side of the psoas tertius, and unites with it near the supracondyloid ridge on the inner border of the femur.

The *Ilio-femoralis anterior* in *Phoca hispida* *arises* from the posterior half of the posterior ventral spine of the ilium, from the ventral surface of the sacro-iliac ligament, from the sacrum, and from the ventral surface of the ilium posterior to the spine. It passes to the lower end of the inner border of the femur, and is *inserted* into the supracondyloid ridge in front of the psoas tertius, and is partly blended with it. Lucae had obviously recognised this muscle, and though he names it in his plate ix., he does not describe it in the text.

The *Psoas minor* or *secundus* in the larger *Phoca vitulina*, as in the Earless Seals, is the largest muscle of this group. It *arises* from the ventral surfaces of the 14th and 15th ribs and their rib-joints, from the sides of the 14th and 15th vertebræ, from the ventral surfaces of the bodies of these vertebræ, and from the ventral surfaces of the transverse processes of all the lumbar vertebræ, and is *inserted* into the pectineal eminence. A similar insertion has been recognised by the authorities already named in the specimens they describe.

In the small *Phoca vitulina*, *Phoca barbata*, *Phoca hispida*, in *Macrorhinus*, and in *Arctoccephalus* it is much smaller than the psoas major, and is a thin fusiform band, which *arises* by short tendons from the posterior aspect of the rounded tips of the transverse processes of the 2nd, 3rd, and 4th lumbar vertebræ. It crosses inwards ventrally to the psoas magnus and tertius, and is *inserted* into the pectineal eminence.

In the large *Phoca vitulina* the lumbo-femoralis posterior is found on the right side only. After dividing the tertius and turning the two ends aside, a muscular band is exposed, which is the direct continuation of the psoas secundus. This is a flat riband-shaped band of fibres from the psoas secundus passing over the insertion of this muscle into the pectineal eminence, and turning outwards upon the psoas tertius to the lower end of the femur on the inner border into which it is *inserted*. The secundus of the left side had no such distribution, and all its fibres ended in the pectineal eminence.

The *Psoas tertius* in the large *Phoca vitulina* is the most inferior, and passes beneath the psoas magnus over the pelvic brim to the lower inner border of the femur. It *arises* under cover of the magnus from the junction of the ventral surfaces and sides of the two last lumbar vertebræ. It lies upon the lumbo-femoralis on the right side and the iliacus on the left, and is *inserted* into the termination of the femoral ridge on the inner border of the femur at the lower end.

In the small *Phoca vitulina* it is a band of muscular fibres 1 inch broad, stretching from the lowest lumbar vertebra to the femur. It *arises* from the ventral surface of the hinder half of the