

the outer surfaces of the five lower ribs below the insertion of the lateral division of the erector spinæ. These five origins interdigitate with the external oblique. The hindmost fibres curve sharply forwards, the rest are almost longitudinal, the anterior ones most so. It passes over the posterior angle of the scapula and divides into two parts; the *outer* is *inserted* into the posterior border of the abdominal part of the pectoral muscle; the *inner* blends with the tendon on the dorsal surface of the teres major, and is *inserted* with it into the inner border of the humerus, the tendon being next the bone and the fleshy part of the teres above. The *origin* in *Phoca barbata* is from the spines of the 5th dorsal vertebræ to the 3rd lumbar, otherwise the description is the same; and in *Phoca hispida* the *origin* is from the 4th dorsal spine, and the spines of all the remaining dorsal vertebræ, from the lumbar aponeurosis as far back as the 4th lumbar spine, and for the rest as in *Phoca vitulina*.

In *Arctocephalus gazella* it *arises* from the lumbar aponeurosis opposite the 3rd lumbar spine as far forwards as the 12th dorsal vertebra, from the spines of the 12th dorsal vertebra to the spines of the 7th dorsal by muscular fibres, and from the outer middle surfaces of the 9th to the 15th ribs. The posterior fibres do not curve sharply forwards but ascend obliquely forwards and outwards, the anterior, as in *Phoca vitulina*, are almost transverse. The anterior border passes outwards, touching the posterior angle of the scapula above the serratus magnus, and beneath the dorsi-epitrochlear division of the triceps. At the middle of the posterior border of the latter muscle it divides into two parts. The *inner* part has the same insertion as in *Phoca vitulina*, and the *outer* part blends with the thoracico-abdominal part of the pectoral muscle opposite the lateral aspect of the 5th rib. The inner part brings the fore-limb backwards and turns it inwards. The outer acts on the pectoral muscle.

In the Phocinæ and *Arctocephalus* it is supplied by dorsal and lateral cutaneous spinal and lumbar nerves, and by the subscapular nerve.

The latissimus separates into two parts about midway between its origin and insertion, forming an inner and outer division. In *Arctocephalus* the outer division of the latissimus goes to the thoracico-abdominal part, in the Phocinæ to the abdominal. There are no slips coming from the posterior angle of the scapula.

The SECOND LAYER of the superficial muscles of the back connected with the fore-limb consists in the Phocinæ of the levator anguli scapulæ, three rhomboidei, and the atlanto-humeral; but in *Arctocephalus gazella* the muscles are levator anguli scapulæ, two rhomboidei, and atlanto-scapular.

The *Levator anguli scapulæ* in the Phocinæ lies below the cephalo-humeral and the trapezius. It is an elongated slip and *arises* by an aponeurotic band from the ventral surface of the transverse process of the atlas. At its origin it is situated dorsally to the atlanto-humeral, coming in contact with the anterior angle of the scapula and overlapping it, to be *inserted* into the scapula between the spine and the vertebral border, and into the vertebral border between the spine and the anterior angle. The ventral surface at the origin is posterior at the insertion, giving the muscle half a turn.

This muscle in *Arctocephalus gazella* is an elongated triangle, and lies under cover of the rhomboideus capitis over the back of the scapula. The *origin* was destroyed. It is *inserted* as in the Phocinæ, but falls short of the anterior end of the vertebral border of the scapula by 1 inch. It moves forwards the anterior angle of the scapula and rotates it upon the back.