

The deep layer attaches itself to the whole extent of the scapular spine, to its posterior lip, and posterior border; some fasciculi immediately below the spine are confluent with the deltoid. In the larger *Phoca vitulina* it arises from the 1st dorsal vertebra to the 5th. This part was destroyed both in *Phoca barbata* and in *Phoca hispida*.

In *Arctocephalus gazella* the insertion was traceable, and for the sake of clearness it is advantageous to divide this attachment into an outer and an inner half. The outer half consists, as in the intervening fibres of *Phoca vitulina*, of a superficial and a deep set of fibres. The superficial ones of the outer half blend with the deltoid posterior to the scapular spine. The deeper fibres of this half are inserted into the outer half of the spine, into its posterior lip, and posterior border, to within one-eighth of an inch from the axillary termination. The fibres of the inner half cross the spine of the scapula to blend with the deltoid.

As in the Earless and Eared Seals, owing to absence of a clavicle the spine of the scapula does not possess a well-formed acromion process but ends abruptly about 1 inch from the axillary border, a modification in the attachment of the fibres is occasioned. In the Phocinæ the most anterior fibres correspond with those in human anatomy attached to the acromion, and cross to the humerus over the gap formed by the stunted spine; in *Arctocephalus* the anterior part of the trapezius is smaller and does not pass to the humerus. In both, some of the fibres of the anterior part blend with the deltoid and must at times work in unison with it. The posterior part of the trapezius is at right angles to the deltoid, and the anterior part nearly in a plane with the deltoid fibres. This part will draw the shoulder forwards and slightly backwards with rotation upon the ribs; also pull the scapula towards the vertebral column.

In the Phocinæ and *Arctocephalus* it is supplied by the spinal accessory and spinal and cervical dorsal nerves.

The posterior part of the trapezius is an elongated triangular slip situated alongside of the vertebral column. It arises from the 6th, 7th, 8th, 9th, and 10th dorsal spines, from the supra-spinous ligaments, and from the lumbar aponeurosis as far back as the 12th dorsal transverse process. It ascends over the posterior angle of the scapula, passes beneath the anterior part of the trapezius, and is inserted by a tendon into the extreme vertebral termination of the scapular spine, and by expansion of this tendon on either side into the scapula, between the vertebral end of the spine and the vertebral border, and into the spine on the outer side. In the large *Phoca vitulina* it arises from the 8th to the 14th dorsal vertebræ, the posterior half of the origin being tendinous. There is some difference in the origins of this part in *Phoca barbata* and *Phoca hispida*. In the former it arises from the 10th, 11th, 12th, and 13th dorsal spines, and in the latter from the 9th, 10th, 11th, and 12th dorsal spines.

This part in *Arctocephalus gazella* is riband-like. It arises from the spines of the 8th, 9th, 10th, and 11th dorsal vertebræ, and, in addition to the parts described in *Phoca vitulina*, has insertions into the dorsal surface of the deltoid by its fibres blending with it. In all the specimens it drags the scapula backwards, tilting the glenoid forwards at the same time.

In the Phocinæ and *Arctocephalus* it is supplied by the spinal accessory and dorsal spinal nerves.

The *Latissimus dorsi* is rectangular; it covers the back, the lateral aspect of the abdomen, and the thorax. It is hidden by the dorso-abdominal panniculus. It arises from the spines of the 5th, 6th, 7th, 8th, and 9th dorsal vertebræ by muscular fibres, which touch those on the opposite side of the spine; from the lumbar aponeurosis as far back as the 5th lumbar vertebra; and from