as already shown, tapers off to a point between the scapulæ. The fibres between the tail and the tibia are directed obliquely upwards and outwards, and remain so for about $1\frac{1}{2}$ inch; the anterior $\frac{1}{2}$ inch is continuous with the hindmost fibres of the lateral abdominal part of the pectoral. Those in front of the portion joining the pectoral upon the leg sweep more obliquely forwards and outwards over the great trochanter of the femur, slightly cover its shaft, and overlap for about half an inch the outer margin of the abdominal pectoral at the level of the knee joint. The fibres lying between the knee and the level of the xiphi-sternum become more oblique in their direction forwards and outwards the nearer they get to the axillary fold. Their lateral ventral terminations cover the lateral portion of the abdominal pectoral for half an inch. The fibres anterior to the plane of the xiphi-sternum are very obliquely directed upwards and outwards; some of them end by mingling with the pectoral panniculus, others branch out along the dorsum of the forearm, and join its deep fascia; a few are lost in the fascia over the triceps and the external condyle; and lastly, those between the spines of the vertebræ and the external condyle of the humerus fade away among the almost transverse fibres of the cervico-scapular part, posterior to the spine of the scapula. It is closely adherent to the latissimus dorsi until it reaches the elbow joint and the posterior border of the ulna; here it leaves the latissimus, and passes over the olecranon and the outer surface of the forearm to join the panniculus descending from the neck. At this position there is a quantity of fat, no doubt to facilitate the movement of the elbow. In the large *Phoca vitulina* a small fasciculus joined the abdominal pectoral muscle near the axilla. It was abundantly supplied with nerves and vessels, coming through the digitations of the external oblique, between the latissimus dorsi and the lateral part of the abdominal pectoral.

The fibres of the cervico-scapular, dorso-abdominal, and pectoral parts are of the ordinary red colour, and the two latter are of uniform strength. The cervico-scapular fibres are coarse, and intermixed with fibrous tissue. Every part is closely connected by fibrous strands with the cutaneous structures above and the muscles beneath. No part is directly *inserted* into bone. The cervico-scapular and the dorso-abdominal are connected to the deep fascia, which is bound to the outer side of the tendon of the pectoral muscle, and so indirectly to the humerus. In the large *Phoca vitulina*, the panniculus terminated abruptly over the dorsum of the scapula, and did not run gradually into the deep fascia on the dorsum of the forearm. All the dermal muscles were composed of red muscle-fibres, and the platysma and lateral cervical had no fascial line dividing them, but were intimately blended.

In the specimens of *Arctocephalus gazella* the panniculus was destroyed.

Myology of the Fore-Limb.

The fore-limb of the Phocinæ and of *Arctocephalus gazella* has inserted into its bones the superficial muscles of the back which are arranged in two layers. The First Layer consists of the Cephalo-humeral, Trapezius, and the Latissimus dorsi.

Before describing this layer, let us glance at the human trapezius. It has a cephalic and a vertebral origin, and a twofold insertion; part of the insertion going to the clavicle and the remainder to the scapular spine. The latter may be regarded as in two parts, because the lowermost fibres form a tendon which glides upon the smooth surface at the vertebral end of the spine,