

extends and abducts ; it therefore acts like the extensor communis digiti secundi in the Phocinæ. It may be as well to note that the Phocinæ have a tendon from the extensor primus to the 5th digit, as is seen in *Arctocephalus*, but not in *Otaria* and *Trichechus*. The actions are as usual.

The *Tensor of the posterior annular ligament*, named by Lucae tensor ligamenti carpi dorsalis communis, springs from the extensor communis digitorum secundus, near the external condyle, and consists chiefly of a narrow tendinous band. It is *inserted* into the middle of the upper edge of the outer or posterior annular ligament. In *Phoca hispida* and *Phoca barbata* it could not be made out owing to the condition of the specimens, but is most likely present in them. On referring to the accounts of *Otaria* and the Walrus it will be seen that in them the extensor minimi digiti and extensor medii digiti form one set of the extensors, and as the tensor comes out of the same set, I consider it to be the representative of the extensor medii digiti of the Sea Lion and Walrus.

The *Extensor carpi ulnaris* in the Phocinæ *arises* from the external condyle, from the outer surface of the ulna beside the articular facet for the radius ; and from the ligament of the joint. It passes through the fifth division of the annular ligament ; and is *inserted* into the middle of the ulnar side of the 5th metacarpal bone.

In *Arctocephalus* the anconeus externus partly covers its origin. It *arises* from the external surface of the olecranon, between the anterior and middle tubercles (Pl. VII. fig. 4) ; and from the outer edge of the quadrilateral surface behind the great sigmoid cavity of the ulna. It descends to the carpus on the inner side of the externus, and, after crossing the extensor proprius pollicis, is *inserted* into the base and head of the ulnar side of the 5th metacarpal, but chiefly into the head of the first phalanx on the ulnar side. In *Otaria* and *Trichechus* it is inserted only into the 5th metacarpal. It extends the manus, powerfully abducts it, stretching out the digits, besides aiding extension of the forearm. It is supplied by the posterior interosseous nerve.

The *Supinator brevis* *arises* from the external condyle of the humerus, and from the ligament of the elbow-joint on the external surface. It is *inserted* into the upper two-thirds of the anterior border of the radial shaft, into the anterior third of the inner surface down to the pronator teres insertion, and into the anterior two-thirds of the outer surface to the same insertion.

In *Arctocephalus* this muscle is hidden on the outer aspect of the radius by the downward expansion of the extensive lateral ligament. It *arises* from the posterior and external surface of the external condyle below the external lateral ligament, from the posterior aspect of the capsular ligament covering the posterior surface of the condyle, from the capsule over the outer side of the head of the radius, also from the outer half of the capsule covering the anterior aspect of the head of the radius, and slightly from the front of the capsule covering the anterior side of the external condyle. The fibres from the back of the condyle are mostly tendinous, and all are parallel to the radial shaft. It is *inserted* into the anterior half of the neck on its outer surface, into the external surface of the shaft of the radius, as far down as the lowest fibres of insertion of the pronator radii teres, that is about the middle of the bone ; into the neck of the shaft of the anterior border to the insertion of the same muscle, and slightly into the inner border below the neck.

In *Trichechus*, as in *Arctocephalus* and the Phocinæ, it has only one head of origin, but in *Otaria* it has two heads, the additional one from the ulna below the coronoid process. It supinates the forearm and steadies the joint. It is supplied by the posterior interosseous nerve.

In *Arctocephalus* the *Extensor proprius pollicis* covers a considerable part of the flexor carpi