

longus, both nerves pass under cover of it to reach their destination, and the lower nerve supplies it. As a sensory nerve to the outer aspect of the fore limb, the musculo-cutaneous finds a substitute in the cutaneous division of the circumflex. It is by no means uncommon for the musculo-cutaneous to have a purely motor function. According to Swan,<sup>1</sup> this is the case in the Fox, and its place is here supplied by branches which spring from one of the long roots of the median, a little way above the elbow. In the Dog and the Cat it has the usual double distribution.<sup>2</sup>

*Musculo-spiral* (Pl. I. fig. 6, *m.s.*; Pl. II. fig. 4, *m.s.n.*, and fig. 6, *m.s.*).—This nerve does not end in front of the elbow by dividing into a radial and a posterior interosseous division. It is carried downwards to the extensor aspect of the forearm as one undivided trunk.

In its course it closely corresponds with the same nerve in other Mammals. Passing, in the first instance, downwards, it soon pierces the internal head of the triceps in the *Thylacine*, but in the *Cuscus* runs behind the humerus between the outer and inner heads of the muscle. It then comes forward through the external intermuscular septum, and continues its course to the elbow-joint upon the supra-condyloid ridge, and lies deeply in the interval between the supinator longus and the brachialis anticus. In the *Thylacine*, in which the supinator longus is poorly developed, it lies between the extensor carpi radialis longior and the brachialis anticus. At a lower level it lies directly upon the anterior ligament of the elbow-joint, and then diverging outwards and backwards it winds round the neck of the radius under cover of the supinator brevis in *Thylacinus*, but through its midst in the *Cuscus*, and thus gains the extensor aspect of the forearm. Here it is placed between the superficial and deep layers of extensor muscles, and ends by giving off numerous branches to the neighbouring muscles and one large cutaneous nerve (Pl. II. fig. 5, *m.s.n.*).

*Branches.*—On the inner aspect of the arm, before it pierces the inner head of the triceps, it supplies twigs to the middle and inner heads of the triceps, and also to the dorsi-epitrochlear muscle (Pl. II. fig. 4, *d.e.n.*), thus showing that this latter muscle must be associated with the triceps, and not with the latissimus dorsi from which it springs. Behind the humerus branches are given to the external head of the triceps; and on the outer aspect of the arm, before it passes under cover of the supinator brevis, it yields twigs to the supinator longus, extensor carpi radialis longior and brevior, and to the superficial aspect of the supinator brevis. On the dorsal aspect of the forearm (Pl. II. fig. 5, *m.s.n.*) it supplies all the extensor muscles, and the anconeus externus in the case of the *Cuscus*. The cutaneous branch is the direct continuation downwards of the nerve itself. It becomes superficial about the middle of the forearm by coming out between the extensor communis digitorum and the extensor secundus digitorum (*i.e.*, extensor

<sup>1</sup> Swan's Comparative Anatomy of the Nervous System.

<sup>2</sup> Chauveau's Comparative Anatomy.