

absent. It is fairly broad and ribband-shaped, overlapping the *semi-membranosus* in the Oceanitidæ at its origin, and inserted into the femur together with the femoro-caudal. In the genera *Fregetta*, *Puffinus*, and *Majaqueus* it is decidedly small.

The *semi-tendinosus* (*t.c.*, figs. 1-3, *s.t.*) muscle is always present and strong. It arises from the iliac bone round its most posterior angle, and has no connection at all with the caudal vertebræ. Anteriorly it slightly overlaps the *biceps*.

Excepting in the Oceanitidæ, it has no accessory head, so that all its fibres are inserted by a thin, broad tendon, quite distinct from that of the *semi-membranosus*, on to the tibia. In the Oceanitidæ, in all the species and genera, there is a strong and broad accessory head, arising from the femur, as usual, and joining the main belly of the muscle by an oblique tendinous raphè (*vide* Pl. V. fig. 3, *a.s.t.*).

The *semi-membranosus* (*t.c.*, figs. 1-3, *s.m.*) is always very large, of broad, flat, ribband shape, not so parallel with the *semi-tendinosus* nor so covered by it, as usual, its direction being more oblique than is that of the other muscle, and thus more parallel to that of the adductors. It arises from the posterior margin of the ilium, ischium, and pubis, from a little above the ischial prominence to within a small distance of the end of the pubis. Its insertion is by a thin, broad tendon, anterior to, and separate from, that of the *semi-tendinosus*.

Of the other muscles in the hind-limb the *biceps* always passes through a tendinous loop on its way to its insertion, as is nearly always the case with birds.

The *obturator externus* is never large, and is inserted near the femur head. The *obturator internus* is of peculiar shape, nearly oval, but with a slight indication of becoming triangular. The deep flexors of the toes and of the hallux blend, usually about half way down the leg, and their tendons may become ossified. Even when a hallux is present it receives no tendon at all from these muscles.

#### 4. OTHER ANATOMICAL FEATURES.

There are always two carotid arteries situated in the hypapophysial canal. There are also two jugular veins, the right of which is frequently the largest.

The main artery of the leg is always the sciatic one, accompanying as it does the sciatic nerve.

In the genus *Pelecanoïdes*, as has already been described by Garrod (*cf. antea*, p. 10), the femoral vein, instead of being, as usual in birds, deep of the femoro-caudal muscle,—from the external border of which it then seems, in the ordinary course of dissection for the thigh-muscles, to emerge (Pl. V. fig. 2, *f.v.*),—is superficial to it, appearing at the external edge of the obturator externus, and then crossing the femoro-caudal superficially as represented in Pl. V. fig. 4, *f.v.*