

flexor brevis indicis. Lying along the inner side of this muscle is a strong fibrous cord which is attached by its proximal end to the base of the second metatarsal bone. Its distal end splits into two parts which stretch across between the adjacent sesamoids of the index and hallux. The fleshy fibres of the muscle are inserted into the inner sesamoid of the index, through the agency of the outer limb of this fibrous band. The fibrous cord is thus the undoubted representative of the inner head of the first dorsal interosseus, such as is present in the case of the second and third dorsal interossei.

Ruge figures and gives a short description of the dorsal interossei in the *Ornithorhynchus*. He represents them as single-headed muscles, with simple insertions, and so placed as to abduct the toes from a line drawn through the index. I have not seen this arrangement in any of the specimens I have examined.

*Intermediate layer.*—Whilst there can be no doubt as to the presence of a series of flexores breves, constituting an intermediate layer, the individuality of these muscles is, in a great measure, obscured by their more or less complete fusion with the dorsal interossei. The two heads also of each member of the group show a tendency to coalesce, so that an examination of them, before they have been thoroughly cleaned, gives rise to the impression that each consists of a single fleshy belly, lying upon the metatarsal bone, and inserted into the plantar surface of the base of the proximal phalanx of the digit, with which it is connected. A careful dissection, however, will reveal the fact that they are, as a general rule, two-headed. To effect their separation from the dorsal interossei, it is necessary to reflect the latter muscles from the dorsal aspect of the foot. It is then seen that whilst in some cases the heads of the flexores breves are inseparably united with the dorsal interossei, yet in other cases the union is only partial.

In a young male specimen which I had the opportunity of examining there was little or no fusion between the flexores breves and the dorsal interossei, whereas, on the other hand, the heads of the individual muscles were closely united. This coalescence between the heads of the flexores breves would seem to indicate that the usual two slips of each muscle are derived originally from a single fleshy mass.

Each digit, with the exception of the minimus, is provided with a flexor brevis. These present the usual attachments, but their insertions are more plantar in position. The flexor brevis hallucis is a single bellied muscle which takes origin from the internal cuneiform bone, and is inserted into the inner side of the base of the first phalanx of the hallux. From its taking a more proximal origin than its neighbours, it is probable that it holds in its midst the fibres of the absent abductor hallucis. Indeed Ruge applies this name to the entire muscle. I think, however, that it is better to look upon it as a combination of both.

*Plantar nerves.*—The plantar nerves have an arrangement in the foot of the *Ornithorhynchus* somewhat different from that generally found throughout Mammalia. The internal plantar nerve alone enters the sole by the hollow of the os calcis, in company with