

the interossei as extending between the bones into the sole and into the palm. He appears to have had a very just conception as to the homology of these muscle extensions. In page 50 of his article he refers to them as flexores breves. He makes no mention of the adductors which were so apparent in the manus of the animal I dissected.

Cuvier and Laurillard figure the dorsal interossei in both the hand and foot of the three-toed Sloth (pl. cclii. fig. 1).

UNGULATA.

The feet of the Horse, Ox, Sheep, Camel, and Pig are of great interest on account of the modifications which the intrinsic muscles have undergone to suit the requirements of the limb. In the first three of these animals the different steps by which the process has been brought about can be traced with great exactness.

Equus caballus (Horse), (Pl. IX. fig. 7, and Pl. XI. figs. 7 and 7a).

In the foot of the Horse, the middle digit is alone developed. It consists of a powerful metatarsal, succeeded by three phalanges. Rudiments of the second and third metatarsal bones are also present, but these do not extend so far down as the metatarso-phalangeal or fetlock joint, and they support no phalanges. Now this single digit of the horse is supplied with the three typical intrinsic muscles which usually belong to the medius or middle toe, viz. : the flexor brevis medii and the second and third dorsal interosseous muscles.

The flexor brevis medii (Pl. IX. fig. 7, *f*³) is converted into fibrous tissue, and forms an exceedingly powerful ligamentous structure (nearly twice as thick as the tendo achillis of man) which is termed by veterinary anatomists the "suspensory ligament of the fetlock" or "ligamentum volare rectum ossium sesamoideorum superius." It lies upon the posterior surface of the large middle metatarsal bone, and is attached by its upper end to the plantar aspect of the base of this bone, and also to the lower tarsal bones. Inferiorly, it divides into two portions which, diverging from each other, embrace the metatarso-phalangeal or fetlock joint, and are inserted partly into the sesamoid bones on the plantar aspect of the base of the first phalanx and partly into the extensor tendon on the dorsal aspect of the same phalanx.

The transformation of this ligament into fibrous tissue, enables it to play a most important part in the mechanism of the limb. It prevents over extension at the fetlock joint, and its value in this respect is evidenced by the fact that in cases where it is ruptured, the animal becomes what, in veterinary language, is termed "broken down," *i.e.*, the fetlock joint sinks down and the hoof has a tendency to tilt forwards and upwards.

The most interesting point, however, in connection with this structure, is that it bears its history on its face. Almost invariably two thin streaks of striated muscular fibres are to be found on its superficial surface, leading down to its two inferior divisions.