

Again, on examining its deep surface, two very distinct strands of pink fleshy tissue are always observed extending throughout the entire length of the ligament. These consist in each case of short oblique striated fibres, converging towards the middle line of the ligament. They represent those muscular fibres of the two heads of the flexor brevis which have not yet been converted into fibrous tissue.

On making a thin microscopic transverse section of the suspensory ligament, the muscular fibres are seen to sink deeply into its substance. Placing such a section against a black ground, and examining it with the naked eye, two very distinct crescentic outlines of transversely divided muscular fibres are observed embedded in the general mass of tendinous tissue (Pl. XI. fig. 7). Subjecting now the specimen to the microscopic test, we find that the outlines of muscular fibres are broken at intervals by quantities of fat cells, and amidst these we can detect, every here and there, transversely divided nerves and blood-vessels (Pl. XI. fig. 7, *a*). These crescentic outlines of a tissue so foreign to the intimate structure of a true ligament undoubtedly represent the remains of the two heads of the muscle from which the ligament is derived.

The muscular tissue is so small in amount in comparison with the bulk of the ligament that it can exercise no function whatever. To account for its existence, we must of course suppose that it receives twigs from the nerves which traverse the structure, and further, that it contracts; but it would be absurd to imagine that the contraction could be followed by any appreciable result.

Veterinary anatomists are quite familiar with the presence of these fleshy fibres. Gamgee and Law¹ state that the suspensory ligament has in most cases a few muscular fibres. Chauveaux² remarks that it often contains "fasciculi of fleshy fibres in its texture." Perhaps of all books on veterinary anatomy, Percival, in his work upon the Horse, gives the best account of the relation of these muscular fibres to the ligament. To quote his words:—"In composition and texture, this ligament possesses peculiarities, it has a sanguineous tinge interiorly, which is not perceptible in other ligaments or tendons, and its fibres, which are very coarse, are disposed in layers. But its chief peculiarity consists in its exhibiting an intertexture of delicate, pinky, fleshy fibres which seem to be the uniting medium of the ligamentous fasciculi."³

All are likewise agreed as to muscular derivation of the ligament, although there is considerable difference of opinion as to the actual muscles which have entered into its composition. George Stubbs,⁴ writing so far as back as 1766, applies the term "interosseus" to the suspensory ligament, but considers it the representative of no less than five muscles. To use his own words, "it is of a ligamentous nature, but it supplies the places of the interosseus, the short flexor, adductor, and abductor of the great toe, the

¹ General and Descriptive Anatomy of the Domestic Animals, p. 277.

² Comparative Anatomy (translated by Fleming), p. 157.

³ Anatomy of the Horse, p. 74.

⁴ Anatomy of the Horse, Explanation to plate. xv.