

But, to return to the human hand; in the fingers and palm of a man who uses the fore-hammer, the cuticle is thickened in a remarkable manner. The depressed lines, however, in its inner surface become deeper, and the villi projecting into them longer; which, joined to the aptitude of the cuticle to convey the impression to those included nerves, leaves him in possession of the sense of touch in a very high degree.

In the foot of the ostrich we have a magnified view of the thickened cuticle and the lengthened nerves. This outer skin of its foot almost equals in thickness the hoof of the *solidungula*, and when it is separated from the sensible sole, the villi, or papillæ, having in them the sensible nerves, are withdrawn, leaving corresponding foramina or pores in the sole. We perceive that if the object had been merely to cover and protect the foot, it would have been sufficient to have invested it with a succession of solid and dead layers of cuticle. This would have been the case had the cuticle been merely thickened by pressure, and had there been no design to make a provision adapted in all respects to the habits of the bird.

Such, then, is the structure of the organ of touch: obvious in the extremities of the fingers; magnified in the foot of the horse or of the