

But there is another use for certain small muscles in the hand. The combined strength of all the muscles, in grasping, must be very great: indeed, the power is exhibited when we see a sailor hanging by a rope, and raising his whole body with one arm. What then must be the pressure upon the hand? It would be too much for the texture even of bones and tendons, and certainly, for the blood vessels and nerves, were not the palms of the hands, the inside of the fingers and their tips, guarded by cushions. The elastic pad in the foot of the horse and camel is not a whit more appropriate than the fine elastic texture of the hand. To add to this purely passive defence there is a muscle, which runs across the palm, and more especially supports the cushion on the inner or ulnar edge: it acts powerfully as we grasp; and it is this muscle which, raising the edge of the palm, hollows it, and adapts it to lave water, forming the cup of Diogenes.

Whilst the cushions on the ends of the fingers defend them in the powerful actions of the hand, we shall presently see that they are useful in subservience to the nerves of touch; conferring a power of receiving impressions, which the utmost delicacy of the nerves themselves could not bestow.

After the many illustrations from mechanics which we have offered, the muscular power itself