

when the action of the muscle is conjoined, the two forces, progressively increasing, greatly augment the velocity of the descent.

The same interchange of power for velocity, which takes place in the arm, adapts a man's hand and fingers to a thousand arts, requiring quick or lively motions. The fingers of a lady, playing on the pianoforte, or of the compositor with his types, are instances of the advantage gained by this sacrifice of force for velocity of movement. The spring of the foot and toe is bestowed in the same manner, and gives elasticity and rapidity in running, dancing, and leaping.

The motions of the fingers do not result merely from the action of the large muscles which lie on the fore-arm : these are for the more powerful efforts ; but in the palm of the hand, and between the metacarpal bones, there are small muscles, (*lumbricales* and *interossei*) which perform the finer motions, — expanding the fingers, and moving them in every direction with quickness and delicacy. These small muscles, attached to the near extremities of the bones of the fingers where they form the first joint, being inserted near the centre of motion, move the ends of the fingers with very great velocity. They are the organs which give the hand the power of spinning, weaving, engraving ; and as they produce the quick motions of the musician's fingers they are called by the anatomists *fidicinales*.