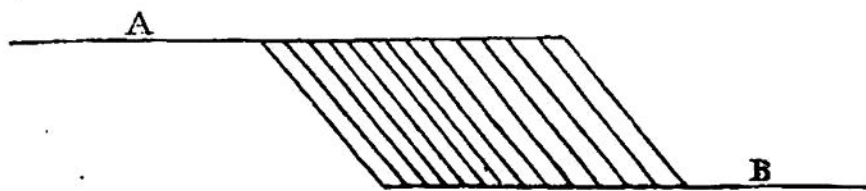


dred muscles so as to produce a change of posture or action of the body ; and we now perceive that the power taken from one class of our muscles, may be considered as if it were bestowed on the other ; so that the property of life, which we call the irritability, or action of a muscle, is upon the whole, less exhausted than would be the case on any other supposition.

As to the second head, our demonstration is of an easier kind. We have said that nature bestows abundantly, but not superfluously ; a truth evinced in the arrangement of the muscles. All the muscles of the limbs have their fibres running in an oblique direction,—thus A. being the tendinous origin of a muscle, and B. the tendinous insertion, the fleshy fibres run obliquely between these two tendons.



The fibre acting thus obliquely loses power, but gains the property of pulling what is attached to its further extremity through a greater space, while it contracts ; and consequently the velocity is increased. This mechanical arrangement is intelligible on the law, that velocity of motion through space, is equal to power or weight. Here in the muscle, there is a resignation of power to obtain velocity of motion.