

of a corresponding movement in the trunk. When we stand, we cannot raise or extend the arm without a new position of the body, and a poising of it, through the action of a hundred muscles.

ON THE ACTION OF THE MUSCLES OF THE ARM.

We shall consider this subject under two heads ; in the first, we shall give examples of the living property of the muscles ; and then of the mechanical contrivances, in their form and application. In all that regards the muscles, we see the most bountiful supply of power commensurate to the object, but never any thing in the least degree superabundant. If the limb is to be moved by bringing a muscle, or a set of muscles into action, the power is not given in that excess which would enable them to overcome their opponents ; but the property of action is withdrawn from the opponents ; they become relaxed, and the muscles, which are in a state of contraction, perform their office with comparative ease. A stationary condition of the limb results from a balanced but regulated action of all the muscles ; which condition may be called their tone. If, in an experiment, a weight be attached to the tendon of an extensor muscle, it will draw out that muscle to a certain degree, until its tone or permanent state resists the weight : but if the