

by the laws of the association of ideas. But even the sense of touch, which has been generally regarded as the least liable to fallacy, is not exempt from this source of error, as is proved by the well known experiment of feeling a single ball, of about the size of a pea, between two fingers which are crossed; for there is then a distinct perception of the presence of two balls instead of one.

But limited as our senses are in their range of perception, and liable to occasional error, we cannot but perceive, that, both in ourselves, and also in every class of animals, they have been studiously adjusted, not only to the properties and the constitution of the material world, but, also, to the respective wants and necessities of each species, in the situations and circumstances where it has been placed by the gracious and beneficent Author of its being.

If the sensorial functions had been limited to mere sensation and perception, conjoined with the capacity of passive enjoyment and of suffering, the purposes of animal existence would have been but imperfectly accomplished; for, in order that the sentient being may secure the possession of those objects which are agreeable and salutary, and avoid or reject those which are painful or injurious, it is necessary that he should possess the power of spontaneous action. Hence, the faculty of *Voluntary Motion* is superadded to the other sensorial functions. The muscles which move the limbs, the trunk, the head, and organs of sense,—all those parts, in a word, which establish relations with the external world, are, through the intermedium of a separate set of nervous filaments, totally distinct from those which are subservient to sensation,* made to communicate directly with the sensorium, and are thereby placed under the direct control and guidance of the will. The mental act of volition is doubtless accompanied by some corresponding physical change in that part of the sensorium, whence the *motor nerves*, or

* On this subject I must refer the reader to the researches of Sir Charles Bell, and Magendie, who have completely established the distinction between these two classes of nerves.