the brain acts on the nerves, and communicates the vibration it has received; and this vibration it is which produces progression, and all the other exterior actions of the body. Whenever a cause acts upon a body, we know that the body also acts upon the cause. Thus objects act upon animals by means of the senses, and animals act upon the object by its exterior movements. In general action is the cause, and re-action the effect.

It may be said, that in solid bodies, which follow the laws of mechanism, the re-action is always equal to the action; but that in the animal body it appears that the re-action is greater than the action, and that the other exterior movements ought not to be considered as simple effects of the impression of objects upon the senses. To this objection I reply, that though in certain cases effects appear proportioned to their causes, there is in Nature an infinite number of cases were the effects bear no kind of proportion to their apparent causes. By a single spark of fire a magazine of powder may be set in flame, and a citadel be blown up. By electricity a slight friction produces a violent shock, which is communicated to great distances, and if a thousand persons touch each other, they would all be almost as much af-