

themselves; or are they mere phantasms and creations of the organs of sense, through which we become acquainted with them? The discussion of this question will probably be considered by most as superfluous; but for the sake of those (if there be any) who entertain doubts upon the point, it may be remarked, that the sensations, though admitted to be mere signals or indications, bearing little or no analogy with the causes producing them, and therefore throwing little light upon their nature, do nevertheless represent real and substantial operations of some sort, in the bodies themselves. This might be proved, were it necessary, by a variety of arguments; but perhaps one of the most striking arguments in favour of the reality of chemical changes, may be deduced from the subserviency to them, of those mechanical contrivances and operations, every where existing in organized beings. At least, half the mechanism in a living animal is subservient to the chemical changes constantly going on in it, and necessary to its existence. Take, for instance, the circulation of the blood: what a complicated apparatus is here employed for the simple purpose of exposing the blood to the action of the air in the lungs, in order that it may there undergo some chemical change. Now, surely no one can reasonably doubt that this chemical change is as much a reality, as the mechanism by which it has been