this one and only agent which matter obeys in its changes of form and situation. We may hesitate about admitting into the system of created things around us so vast an amount of additional or extraneous vis viva, as the totality of animal exertion since the first introduction of life upon earth would seem to imply. But this is not necessary. The actual force necessary to be originated to give rise to the utmost imaginable exertion of animal power in any case, may be no greater than is required to remove a single material molecule from its place through a space inconceivably minute-no more in comparison with the dynamical force disengaged, directly or indirectly, by the act, than the pull of a hair trigger in comparison with the force of the mine which it explodes. But without the power to make some material disposition, to originate some movement, or to change, at least temporarily, the amount of dynamical force appropriate to some one or more material molecules, the mechanical results of human or animal volition are inconceivable. It matters not that we are ignorant of the mode in which this is performed. It suffices to bring the origination of dynamical power, to however small an extent, within the domain of acknowledged personality.

(10.) It will perhaps be objected to this, that the principle so generally cited, and now so universally recognized as a dominant one in physics—that of the "conservation of force"—stands opposed to any, even the smallest amount of arbitrary change in the total of "force" existing in the universe. This principle, so far as it rests upon any scientific basis as a legitimate conclu-

468