4. Any change whatsoever requires at least two elements acting in concert, both of which contain the causes (of such change).

Any one elementary particle is incapable, of itself and alone, of being changed. For a change of state in such a particle would require an active force either within or without that particle. If such a force were external, then a second particle is supposed, from which it proceeds ; if such a force be internal, what exists now to make it active, which did not exist previously? The mere lapse of moments could not make it active, for time is a constant quantity, it remains the same throughout. Either, then, the particle (for the supposed change of state) must lose something which it formerly had, or it must gain something which it formerly had not; and, in either case, its elementary nature would be destroyed. And hence it is said that a particle in motion or at rest, would for ever continue in motion or at rest. unless by virtue of other forces external to, and acting on it.

If a second particle be supposed capable of acting, and which now acts with the first, then the change which each has conspired to bring about will be the effect. Thus, for example, gravity is not spoken of in a particle of matter in relation to pure space, but in relation to anotherparticle in which the like force exists. Thus, suppose pure water to be formed by a particle of