phenomena of *gravitation*, &c.:* and those agencies which operate among the different constituent molecules, of which all bodies are composed; and which are denominated *molecular*, or *polarizing* forces, &c. Of each of these subordinate agencies, we shall in the first place endeavour to convey some idea to the general reader.

* Many objections have been offered to the term *vis inertiæ* adopted by Newton. Indeed, to speak of mere *inertia*, or *inactivity*, as a force, is obviously absurd. We have always agreed with those who think that the term *inertia* has been unfortunately chosen; since *inertia* expresses only one quality, as it were, of that which *is attracted*, or which *reacts*, in nature. But, we fully acquiesce in the opinion, that whatever *resists attraction* or *reacts*, is as appropriately named a force, in a certain sense of that term, as that which *attracts* or *acts;* and such resistance is, in all instances, virtually considered as a force by the mathematician, however he may choose to designate it. Hence, for the sake of analogy with what follows, we have adopted the supposition of two antagonist forces, viz. *inertia*, (for want of a better name), and *attraction;* which we have denominated the *forces* of gravitation.