The question then at once arises,—are these forces identical? Do the electric polarities correspond with the supposed chemical polarities; and do the magnetic polarities correspond with the cohesive polarities of our molecule?

To us, we have no hesitation in saying, this conclusion seems very probable, nay, almost inevitable; not only for the reasons stated, but for others equally striking, which we shall have occasion to refer to hereafter. In the mean time we may briefly consider the subject with a little more attention, and principally with reference to some apparent objections, which may be raised against it. In the first place it may be objected, that it is difficult, from what we know of the varying and capricious character of the electric energies, to suppose they can ever exist in that definite and permanent form, in which they must exist, if they be really identical with the cause of chemical affinity. To this objection, it may be replied, that magnetism can, and does, exist permanently in bodies for ages; and as electricity is an inseparable attendant upon magnetism, this energy must also have equal permanence. Again, a portion of zinc and a portion of copper placed in contact, produce electrical effects as constant and enduring as the metals themselves. The argument, therefore, founded upon the want of permanence, and uniformity, of the electric and magnetic energies,