light, are substances, the molecules of which are influenced by polarizing forces, precisely similar in all respects, to those which influence common matter; that is to say, that the molecules of heat and of light obey laws, similar in all respects to those laws which govern the molecules of ponderable bodies.* We have already alluded to the opinion maintained by some, that heat is a compound principle, consisting of the two forms of electricity in a state of equilibrium. We now draw the attention of the reader to this hypothesis, in order to state, that whatever heat may consist of besides, it is almost impossible to explain its effects upon the polarizing forces, without supposing that it at least involves, if it do not pass into, the electric forces, upon which the polarizing forces appear to us to depend. We have said appear; for as has been already stated, though it be convenient to consider the polarizing forces under the forms of electricity and magnetism, in which they are most usually and palpably manifested to us among ponderable bodies; yet, in their elementary form, these forces may in reality be something very dif-

• We are aware that this opinion is opposed to that of most mathematicians, who favour the undulatory theory of light; and with good reason, so far as they have occasion to consider it: but we are decidedly of opinion, that the *chemical* action of light can be explained only upon chemical principles, whatever these may be. Whether these chemical principles, will hereafter explain what is now so happily illustrated by undulæ, time must determine.