

many propositions readily applicable to particular cases, or rules of philosophizing: We conclude, 1st, That if in our group of facts there be one in which any assigned peculiarity, or attendant circumstance, is wanting or opposite, such peculiarity cannot be the cause we seek.

(147.) 2d, That any circumstance in which all the facts without exception agree, *may* be the cause in question, or, if not, at least a collateral effect of the same cause; if there be but one such point of agreement, this possibility becomes a certainty; and, on the other hand, if there be more than one, they may be concurrent causes.

(148.) 3d, That we are not to deny the existence of a cause in favor of which we have a unanimous agreement of strong analogies, though it may not be apparent how such a cause can produce the effect, or even though it may be difficult to conceive its existence under the circumstances of the case; in such cases we should rather appeal to experience when possible, than decide *a priori* against the cause, and try whether it cannot be made apparent.

(149.) For instance: seeing the sun vividly luminous, every analogy leads us to conclude it intensely hot. How heat can produce light, we know not; and how such a heat can be maintained, we can form no conception. Yet we are not, therefore, entitled to deny the inference.

(150.) 4th, That contrary or opposing facts are equally instructive for the discovery of causes with favorable ones.

(151.) For instance; when air is confined with moistened iron filings in a close vessel over water, its bulk is diminished by a certain portion of it being abstracted and combining with the iron, producing *rust*. And, if the remainder be examined, it is found that it will *not* support flame or animal life. This contrary fact shows that the cause of the support of flame and animal life is to be looked for in that part of the air which the iron abstracts, and which rusts it.

(152.) 5th, That causes will very frequently become