

*real cause?*—is it a fact that the object dewed is colder than the air? Certainly not, one would at first be inclined to say; for what is to *make* it so? But the analogies are cogent and unanimous; and, therefore (pursuant to Rule 3. § 148.), we are not to discard their indications; and, besides, the experiment is easy: we have only to lay a thermometer in contact with the dewed substance, and hang one at a little distance above it out of reach of its influence. The experiment has been therefore made; the question has been asked, and the answer has been invariably in the *affirmative*. Whenever an object contracts dew, *it is* colder than the air. Here, then, we have *an invariable concomitant* circumstance: but is this chill an effect of dew, or its cause? That dews are accompanied with a chill is a common remark; but vulgar prejudice would make the cold the *effect* rather than the cause. We must, therefore, collect more facts, or, which comes to the same thing, vary the circumstances; since every instance in which the circumstances differ is a fresh fact; and, especially, we must note the contrary or negative cases (Rule 4. § 150.), *i. e.* where no dew is produced.

(165.) Now, 1st, no dew is produced on the surface of *polished metals*, but it is very copiously on glass, both exposed with their faces upwards, and in some cases the under side of a horizontal plate of glass is also dewed; which last circumstance (by Rule 1. § 146.) excludes the *fall* of moisture from the sky in an invisible form, which would naturally suggest itself as a cause. In the cases of polished metal and polished glass, the contrast shows evidently that the *substance* has much to do with the phenomenon; therefore, let the substance *alone* be diversified as much as possible, by exposing polished surfaces of various kinds. This done, *a scale of intensity* becomes obvious (Rule 5. § 152.). Those polished substances are found to be most strongly dewed, which conduct heat worst; while those which conduct well, resist dew most effectually. Here we encounter a *law* of the first degree of generality. But, if we expose rough surfaces, instead of polished, we sometimes find