

tion regarding the construction of chronometers, which he thinks he owes to him, is altogether erroneous and absurd. The chronometer mainly differs from the ordinary watch in being formed of a mixture of metals, which preserve so nice a chemical balance, that those changes of temperature which quicken or retard the movements of common time-pieces fail to affect it. Now, let us suppose that the friend and adviser of the sailor had said to him,—using a common metonymy, —there are no chronometers anywhere constructed that so *completely neutralize the temperature* as the ones I recommend to you ; and that the sailor had at once leaped to the conclusion, that the remark was authority enough for holding that it is the principle of chronometers, not to be composed of such counteractive combinations of metals as that the expansion of one shall be checked by the contraction of another, but to keep up an equal temperature within through a heat-engendering quality in the amalgamated metals. Such a mistake might be readily enough originated in this way ; and yet it would be a very serious mistake indeed ; seeing that it would substitute an active for a passive principle,—a principle of equalizing the temperature by acting upon it, for a principle of inert impassibility to the temperature. And of course not only would the sailor himself be in error in taking such a view, but he might seriously compromise the intelligence or integrity of his friend in the judgment of all who held, on his testimony, that it was with his friend, and not from his own misconception of his friend's meaning, that the view had originated. And how, let us ask, ere dismissing our lengthened illustration, is an error such as the supposed one here to be tested, and its erroneousness exposed ? There can be but one reply to such a query. It might be wholly in vain to fall back upon the *ipsissima verba* of the revelation made by the sailor's friend. Though in reality but an enunciation regarding the *authorship* of certain chronometers, it might pos-