lowest being the heaviest; but this result, he says, was not so decided as in the former experiment.

In opposition to this theory, and in proof of the descent of vapour, it was urged that in cloudy weather little or no dew is formed. But Dr. Dufay had observed the deposition of dew on the under as well as the upper surface of the bodies, a fact which seemed to be directly opposed to the supposition that it owed its origin to the descent of atmospheric vapour. In answer to this it was stated, that as more rain falls at the base than on the summit of mountains, though there can be no doubt that rain falls downward, so dew may descend, and yet be formed upon the under surface of bodies. The appearance of dew on the lower surface before the upper, was attributed to the cooling of the inferior mass of the atmosphere before the superior.

Neither of these hypotheses, however, can be maintained. Dr. Wells has proved, by a most beautiful inductive process, founded on an ingenious though simple series of experiments, that dew is produced by the condensation of the atmospheric vapour surrounding the bodies on which it is deposited. We may, however, learn from the history of the opinions which have been entertained on this subject by men given to philosophical pursuits, the absolute necessity of building all our opinions upon authenticated and well-investigated experiments, fully carried out, and under the guidance of legitimate deductions.

These difficulties stood in the way of the determination of the first question, Does the vapour producing dew rise or fall? The next subject of inquiry was still more perplexing. There are some substances which receive the deposition of dew more readily than others, and there are some on which it cannot be deposited; glass receives it readily, but on the metals it is never formed. "The reason of this," says a writer of that period, "is probably because metals promote evaporation more than glass does. Thus, if a piece of metal and a piece of glass are both made equally moist, the former will be found to dry in much less time than the latter Hence it would seem that there is between metals and water some kind of repulsion, and this may be sufficient to keep off the very small quantity that falls in dew; for whatever tends to make water evaporate after it is actually in contact with any substance, also tends to keep the water from ever