

liquid water. A moment's reflection teaches us, that they must be loosened or separated from each other; and, as they cannot separate themselves, that some new agency is requisite for this purpose. It need scarcely be mentioned, that this agent is *Heat*; on the general phenomena and laws of which most important principle, we now proceed to make a few remarks.

*Of Heat.* The sensations termed *heat* and *cold* are too well known to require explanation. These sensations, however, like all others, are merely the effects of some external cause or causes, operating on, and through, our organs, in a manner totally unknown to us. On that cause, and the mode of its operation, various opinions have been entertained: some considering the cause of heat (caloric) to be an existent and material fluid; though of such extreme tenuity and imponderability as to escape our observation, and to become manifest to us only by its effects upon our sensations, and upon all the ponderable forms of matter: others considering the cause of heat to be not material, but a property or principle of motion; which, by exciting a certain species of vibration among the particles of bodies, gives rise to the sensation and effects of heat. Such are the most usual opinions, and the probability is, that they are neither of them literally correct; but that heat, and we may add