http://www.geology.19thcenturyscience.org/books/1808-Buffon/README.htm

It is not, therefore, in proportion to their density, as is commonly supposed, that bodies receive and lose more or less heat, but in an inverse ratio of their solidity; that is, of their greater or lesser *non fluidity*; so that, by the same heat, less time is requisite to heat or cool the most dense fluid.

To prevent the suspicion of vainly dwelling upon assertion, I think it necessary to remark upon what foundation I build this theory; I have found that bodies which should heat in ratio of their diameters, could be only those which were perfectly permeable to heat, and would heat or cool in the same time; hence, I concluded that fluids, whose parts are only held together by a slight connection, might approach nearer to this perfect permeability than solids, whose parts have more cohesion. In consequence of this, I made experiments, by which I found, that with the same heat all fluids, however dense they might be, heat and cool more readily than any solids, however light, so that mercury, for example, heats much more readily than wood, although it be fifteen or sixteen times more dense.

This made me perceive that the progress of heat in bodies cannot, in any case, be made relatively to their density; and I have found

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