

and spirit of wine, which is less dense than water, heats and cools much quicker; so that generally the progress of heat in bodies, as well with regard to the ingress as egress, has no affinity with their density, and is principally made in the ratio of their fluidity, by extending the fluidity to a solid; from hence I concluded, that we should know the real degree of fluidity in bodies, by heating them to the same heat; for their fluidity would be in a like ratio as that of the time during which they would receive and lose this heat; and that it would be the same with solid bodies. They will be so much the more solid, that is to say, so much the more *non fluids*, as they require more time to receive and lose this heat, and that almost generally to what I presume; for I have already tried these experiments on a great number of different matters, and from them I have made a table, which I have endeavoured to render as complete and exact as possible.

I caused several globes to be made of an inch diameter with the greatest possible precision, from the following matters, which nearly represent the Mineral kingdom.

M. Tillet, of the Academy of Sciences, made the globe of refined gold at my particular