

that nothing can contradict, it might be imagined that ductility would follow the order of fusibility, because the greater or less ductility seems to depend on the greater or less adhesion of the parts in each metal ; nevertheless, ductility seems to have as much connection with the order of density, as with that of their fusibility. I would even affirm that it is in a ratio composed of the two others, but that would be only by estimation, and a presumption which is, perhaps not founded ; for it is not so easy to exactly determine the different degrees of fusibility, as those of density ; and as ductility participates of both, and varies according to circumstances, we have not as yet acquired the necessary knowledge to pronounce affirmatively on this subject, though it is most certainly of sufficient importance to merit particular researches. The same metal when cold gives very different results to what it does when hot, although treated in the same manner. Malleability is the first mark of ductility ; but that gives only an imperfect idea of the point to which ductility may extend ; nor can simple lead, the most malleable metal, be drawn into such fine threads as gold, or even as iron, which is the least malleable. Besides we must assist the ductility of metals with the addition of fire, without