and ceases from its redness, according to the thickness of the ingot. If at the moment its redness leaves it, it is drawn from the mold, the under parts will be still red, but this colour will fly off. Now so long as the redness subsists, we can light combustible matters by applying them to the ingot; but as soon as it has lost its incandescent state, there are numbers of matters which it will not set fire to, although the heat which it diffuses is, perhaps a hundred times stronger than that of a straw fire, which would inflame them. This made me think that flame being necessary to the communication of fire, there is therefore a flame in all incandescence. The red colour seems, in fact, to indicate it; and indeed I am convinced, that combustible, and even the most fixed matters, such as gold and silver, when in an incandescent state, are surrounded with a dense flame which extends only to a very short distance, and which is attached to their surface ; and I can easily conceive, that when flame becomes dense to a certain degree, it ceases from obeying the fluctuation of the air. This white or red body, which issues from all bodies in incandescence, and which strikes our eyes, is the evaporation of this dense flame which surrounds the body by renewing itself incessantly on its surface; and even the light of the sun, which

66